

Universities want new negotiations on pay

Universities are to seek further negotiations with the Government on the new salary offer of £312 a year (*The Times* August 8) from October 1. The total offer now consists of 20 per cent, plus the £312, plus £84 threshold payment.

The decision was reached at a 31-hour meeting of the Association of University Teachers and the University Authorities Panel (Committee A) in London last week. They want negotiations in Committee B (consisting of Committee A and the Department of Education and Science) at the end of the month.

A stinging attack on the treatment of university teachers by Mr Mulley, Secretary of State for Education and Science, was made last week by Dr Keith Hampson, secretary of the Conservative parliamentary education committee with responsibility for higher education. Speaking at Orley in Yorkshire, he said:

"University teachers expect to fall behind in regulations, but at each stage in the sorry story the regulations have been interpreted to their detriment. They do not want favoured treatment, only fair treatment. Justice has not been done because Mr Mulley, the new Secretary of State, allowed the date for the implementation of the

income policy to be set on September 1. "The first idea mooted was that all pay increases after August 1 would have to fall within the £6 limit, but this would have 'caught' the police and so the date was moved to September 1. One can imagine that if October 1 had been the crucial date for the miners then it would have been that date which would have been selected for the start of a new policy.

"This Government feels it can walk over university teachers who have no industrial strength or public sympathy. "If the Government hasn't victimized this key group then they have at least acted in bad faith. It is Mr Mulley's duty now to ask the chairman of the Arbitration Tribunal whether the stage 2 cost-of-living bonus was intended to be part of the arbitration settlement. If it was, as I believe it should be, then the Government should grant university staff their just award."

A letter to *The Times* last week from several members of the A.U.T. branch at Bristol ended with the declaration: "It would be ironic if the Government's double-dealing in this matter provoked university teachers—an essentially non-militant group—into taking industrial action in defence of the social contract."

SSRC to close survey unit

by David Walker, Social Sciences Correspondent

The Social Science Research Council is to close one of its major research units to help meet its pressing money problems. The SSRC Survey Unit is to close on the retirement of its present director, Dr Mark Abrams, one of the pioneers of academic opinion sampling in Britain. It is understood the decision was made partly to make economies and partly because of disagreements about the work of the unit and a successor for Dr Abrams.

Set up in 1968, the unit has had a chequered history with continuing arguments over whether it was simply an advisory body or a body that could organize surveys in its own right.

A major project begun in 1971 on detailed surveys of local areas based on a famous American study in Detroit encountered many difficulties and cast some doubt on the unit's role.

One successful feature of the unit's work will continue into 1976. This is the summer school it has run for several years on the methods used in survey work.

Portuguese students and the revolution

from page 1

tion had ever been made) of a 1964 Salazarist decision to extend the period of compulsory schooling from four to six years.

The Ministry, faced with 28,000 "qualified" applicants for 15,000 places, declared that some form of selection was essential. The faculties (in the hands of students and young lecturers) refused. The Government responded in the most drastic way possible—by deciding that in the 1974-75 academic year there would be no new admissions at all.

One effect of this decision has been to add to the ranks of young "revolutionaries" large numbers of bright, middle-class teenagers without jobs or studies and with time on their hands. Another has been to induce the Government to bring back what may just turn out to be the most interesting experiments to come out of the present turmoil—the "Student Civic Service" run by the Ministry but serviced by the Army, which will provide one year's Government-directed community service for school-leavers who wish to enter university.

It needed the failure of the March 11 counter-revolution (and a consequent shift in policy in the direction of Communist influences) to get the idea fully accepted but there are now 1,000 student volunteers working under the new service and for university handicaps leaving school, this summer participation in the service will be compulsory.

Care has been taken to give students jobs of real social importance—for example, teaching literacy and elementary hygiene in remote villages, setting up nursery classes and youth centres in Lisbon's shanty-towns, organizing "cultural" and "local" museums. The main

with the acute social problems of Portugal's urban and rural working-class.

The scheme is strongly opposed by student organizations deeply suspicious of the Communist influence which they see behind it. So far, however, the ultra left students have been unable to block the scheme, and the Ministry is determined to press ahead with it. Indeed, after 16 months in which four different Ministers and five governments have "lacked" the strength or the will to deal with the faculties, officials are now gearing themselves for a year in earnest with the ultra left.

This year's university candidates have been required to take a normal qualifying exam, and an angry protest march and demonstration by some of those who failed has been staged. There are plans to control more closely the distribution of students between disciplines, to fit in with the country's economic planning needs. Most important of all, a law was passed last month putting the universities in the hands of powerful managing councils on which local authorities, trade unions, and Government planners will be represented with the real aim of bringing order to university life.

The students consider that these councils (like the Civic Service) will be dependent on two agencies—local government and the trade union—federation. Intersidually, which are Communist-controlled or influenced, and so regard them as a device for political manipulation. The Ministry dismisses the students' objections as the rationalizations of a middle-class elite concerned to preserve its privileges, power, security, and status. The main

OU needs 100 teachers for new courses

by Frances Gibb

The Open University needs to increase its teaching staff by at least 100 if it is to maintain its academic footing with other universities, says a report on academic staffing published this week.

Unless the present staff of 230 are increased to between 331 and 370, the OU will be unable to meet its target of 87 full courses by 1980, the report says. The staff/student ratio at the OU is about 1:80, compared with about 1:18 at other universities.

The OU offers a total of 43 full courses, with 12 more planned for next year. Students are unable to reach honours degree level in some subjects, mostly in the science faculty.

The breakdown of the course target among faculties is: 19 full courses in the arts; 16 among social sciences; nine in educational studies; 10 in mathematics; 15 in sciences and 15 in technology; and six in interdisciplinary courses.

The report, produced by a joint working party of the Department of Education and Science and the Open University under Dr M. R. Gavin, formerly principal of Chelsea College of Science and Technology, says a staff increase is necessary because academics are overloaded with work and prevented from undertaking adequate research.

It suggests lower productivity, lower rates for staff work, and lower time spent at other universities. Productivity rates are based on the number of weekly student work units a staff member produces.

In arts, this would be cut from 3.1 weekly units to 2.5, and in science from 1.8 to 1.4.

In an attempt to reduce its film deficit, the university has had to curtail its film production, originally planned for next year. Some staff vacancies have also to be frozen.

The report is to be considered by the OU and Mr Mulley, Minister of Education, in October.

Peston attacks Merrett on 'poor investment' approach

by Alan Cane

A professor of finance who suggested that the community gets a poor return for its investment in higher education is sharply admonished in *The Times Educational Supplement* today by Professor Maurice Peston, of Queen Mary College, formerly a special adviser to Mr Reg Prentice.

Professor Alan Merrett, visiting professor of finance at the London Graduate School of Business Studies, suggested that the total cost of a university education including support from parents and earnings foregone was about £15,000 (*THESE*, July 25).

Professor Peston comments: "Accepting all the items Professor Merrett wants to include (which normally one would not since this involves adding unlike things together to produce a meaningless figure) I cannot make 'cost' in his sense reach a figure above £12,000."

"Even to get that one has to bias all the figures in his direction and ignore the possibility that some students might for some of the time have been unemployed and so have no earnings to forgo. Moreover, serious research such as Zeldman's

suggests that the real rate of return at the relevant time was between per cent and 12 per cent."

Professor Peston comes strongly against Professor Merrett's educational philosophy, arguing: "Are there no social benefits from education? Since education in particular (but not great deal of charitable, voluntary education) was justified to help with poverty and the under-education of income, have we progressed too rapidly towards a millennium that all this can be given up?"

Professor Merrett had said that British education is inefficient and inadequate. Professor Peston countered: "We believe that the education of those many devoted people who live their lives in adverse circumstances trying to solve the difficulties arise here with no help from the State. We might also visit some of them and see how they are. I know few teachers who are exhausted at the end of the week and would welcome simple solutions if they were available."

Polys: the right to speak out

The following letter from Dr Arthur Suddaby, vice-chairman of the Committee of Directors of Polytechnics, was published in *The Times* on Monday in response to a letter to *The Times* from Lord Annan, which was also published in *The Times*, July 25.

In the recent correspondence regarding the affairs of the Polytechnic of North London it has been suggested that directors of polytechnics appear to have been slow to recognize the threat to their freedom of expression, and thus to their academic status, that is implied in the disciplinary action recommended against the director of the Polytechnic of North London following a letter he wrote to the Secretary of State for Education and Science.

The Committee of Directors of Polytechnics has been careful not to enter the public controversy about the Polytechnic of North London in order to avoid creating the impression that it was an association reacting in defence of one of its members. The Committee of Directors sees itself as a committee of the academic leaders of polytechnics which meet to consider the educational and administrative problems which are common to all of them and to formulate a common policy in relation to the Department of Education and Science, local authority organizations and higher education.

As Lord Annan's contribution pointed out, however, important and serious issues are being raised which transcend the internal differences which have divided one particular polytechnic. The main issue concerns the role of the director as the academic leader of a polytechnic, as a responsible figure in the

educational system who must free to express his view on general or specific educational matters, public or as the occasion demands, to the Secretary of State. We believe that this right of responsibility of the director of polytechnics is not a matter of local concern, whether or not he is a member of those committees.

A possible conflict of views with those of a committee might well arise, and it would be wise to attend but such a conflict can never affect the proper action in making his views known to the Secretary of State. If a director believes he can put a view on an educational matter which would help the public, then it is his duty to do so whatever unpopular the result.

In particular it is the duty of standards in his institution, where he believes that the proper for the construction of the educational and administrative problems which are common to all of them and to formulate a common policy in relation to the Department of Education and Science, local authority organizations and higher education.

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CNAA proposes greater freedom on validation

A greater degree of freedom for colleges and polytechnics in the validation of new degree courses will be proposed by the Council for National Academic Awards in a discussion paper which is to be published next month.

Under the title 'Partnership in Validation' the paper will reject the idea favoured by several directors that polytechnics should become independent, self-charters institutions.

It will propose instead that departments or schools or subject areas in many experienced institutions should be given more freedom to validate their own courses. Only a few polytechnics are expected to get blanket approval to validate all their courses.

All institutions would still be subject to a quinquennial visitation

Dr Weedon is new Nottingham v-c

Dr B. C. L. Weedon, professor of organic chemistry at Queen's College, London, was named last week as vice-chancellor of Nottingham University in succession to Professor W. J. H. Butterfield, research chemist and lecturer in Imperial College, Professor Weedon, 52, has been at Queen Mary since 1960.

NEXT WEEK
David Coward on French history and literature
University efficiency
F. B. Singleton on the resistance movement

Printed and Published by the Times Newspaper Group, 1, Abchurch Lane, London EC4N 3DF. The Times Newspaper Group is a company limited by guarantee, registered in England, number 1042967. The Times Newspaper Group is a company limited by guarantee, registered in England, number 1042967.

Universities threatened by State, warns Oxford v-c

from Paul Moorman, Foreign Editor

MOSCOW

The role of universities as centres for the "unfettered exchange of ideas" was being increasingly threatened by national governments, Professor John Habakkuk, vice-chancellor of Oxford University, told the sixth quinquennial conference of the International Association of Universities here on Wednesday.

Speaking at the opening session of the conference in the grand Moscow State University on the Lenin Hills overlooking the city, Professor Habakkuk also warned of the danger of romanticizing the adult student.

Recurrent education might not be the way forward it was so often nowadays claimed to be, he said.

He was addressing more than 900 delegates and observers representing 466 universities from 86 countries. Twenty-three British vice-chancellors or their representatives are taking part. The largest contingent from Britain is from the Open University, with four participants.

The theme of the conference, which goes on until Monday, is: "Higher education at the approach of the twenty-first century." Discussion will concentrate on two topics: higher education and the problems of economic and social development, and universities and innovation.

Professor Habakkuk said universities throughout their history had to reconcile various outside pressures with their loyalty to the pursuit of learning. But today pressure was concentrated on two topics: higher education and the problems of economic and social development, and universities and innovation.

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Armed guards sit tight on showcase campus

by David Barchard

Dr Oral Okay, a lecturer at Turkey's showcase Middle East Technical University in Ankara, resigned last Friday.

In the ordinary course of things there would be nothing unusual about this, but Dr Okay's action drew attention to an extraordinary situation. Since May his lectures had been unattended. In July only three students had turned up for their final exams.

"It is the result of trying to administer a university with policemen and soldiers rather than with common sense and cool logic," he said.

Many observers, not usually sympathetic to student unrest, have drawn the same conclusion, and have blamed the apparent breakdown of Turkey's top university on its administrators.

Set in a beautifully designed campus three miles outside Ankara, dotted with pine trees and sculpture, METU appears on the surface to be an academic haven compared to Turkey's other universities, which are crammed into ancient buildings with pitifully few facilities. But visitors soon realize that something is wrong.

Armed soldiers stand guard at the entry to the campus, checking all identity cards, and keeping close watch on visitors who are not members of the university.

The administration claims that these extraordinary precautions are necessary to prevent a resurgence of the urban guerrilla movement which set up a temporary stronghold in the hostels of METU in 1971. The guerrilla action was followed by military intervention and, for a time, the ruthless repression of all far-left activity.

Since then the university authorities (who at METU represent the State) have been under martial law, and policemen and soldiers strolling



THE INVIGILATOR, TURKISH STYLE

to the rest of the Turkish academic world, which is left of centre) have felt that they are sitting on a volcano. On my last visit to the university, I met a senior member of the administration who recognized me with some amazement. "How did you get past our guards?" he asked with complete seriousness.

With Ankara under martial law, and policemen and soldiers strolling

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Chelsea gets \$1m to study environment

by Alan Cane, Science Correspondent

Contracts worth over \$1 million have been awarded to a newly established environmental research unit at Chelsea College, London.

The Environmental Monitoring and Assessment Research Centre, believed to be the first of its kind, came into being on July 1, and funds totalling about \$1.2 million have been awarded by the United Nations, The Rockefeller Foundation and by the Department of the Environment in Britain.

All the work the centre will undertake will be essentially desk studies, according to Professor Gordon Goodman who has been seconded from his post as professor of applied biology at Chelsea College to direct the centre.

In spite of the size of the research contracts, he is already worried about support. "£1 million is in fact a very small sum," he said.

The other chief problem is time. The United Nations funds last for only two years, after which time the centre should close. Professor Goodman is anxious that it should be taken over and continue its work.

Professor Goodman is co-chairman of the monitoring committee of the Scientific Committee on Problems of the Environment (SCOPE) and it is chiefly because he is at Chelsea that the project has been based there.

The broad objective of the centre is to formulate procedures to define, evaluate and eventually solve environmental problems of global, regional and national concern. It will be undertaking this on an international front for SCOPE through the UN environment programme.

The Department of the Environment has put up money for a parallel project concerned with problems of the British environment. It will last for three years, and four full-time scientists will be involved.

Professor Goodman says the broad outline of their work will be to examine the state of environmental monitoring in Britain now and to devise a cost-effective package of measures to protect the British environment from the effects of pollution.

Most of the money will be spent on bringing foreign researchers to the centre to take part in the research. Dr Andrew Sors, chief scientific officer, said it would be appointing a training officer, probably from the Third World.

Pay talks to resume in September

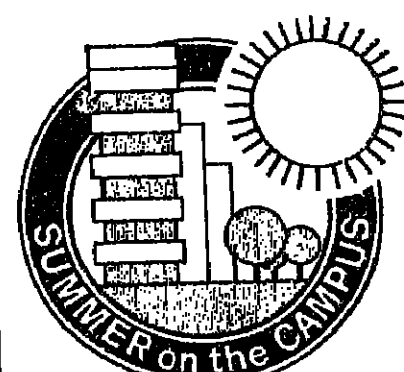
A meeting between the University Authorities Panel and the Department of Education and Science is to be held on September 1 in the next round of the university salary negotiations.

The DES refuses to increase its offer of £312 plus an £84 threshold payment (in addition to an arbitration award of 20 per cent), the Association of University Teachers will put its case to the Advisory, Conciliation and Arbitration Scheme.

College closures confirmed

Thirteen colleges of education are to close, the Department of Education and Science confirmed officially this week. Eleven major centres of teacher education, each with between 1,000 and 1,500 teacher training places, have emerged from reorganization.

Full details, back page.



David Walker visits the social sciences data analysis summer school at Essex, page 4

All spittle, puff and bravura—Peter Hennessy at the first brass band summer school at Lancaster, page 4

Some 30,000 students have been attending Open University summer schools: Robin Mead and Judith Grundy report, page 7

The Resistance
F. B. Singleton reviews three new books on the Yugoslav resistance during the Second World War, page 12

Books
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An attack on the DES
Eric Robinson questions the implications of the Government policy on colleges: "The DES is drunk with its success", page 5

Universities
Two economists suggest methods of encouraging universities to use money more efficiently, page 11

Dark Ages
Another instalment of David Coward's versions of French literature and history, page 6

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Scottish failure rate 'staggeringly high' at St Andrews, report says

by Sue Reid

The disproportionately high failure rate among Scottish students at St Andrews University is causing grave concern. The student academic performance committee, which has published reports highlighting the problem and suggesting solutions.

The students' views are in a booklet named *Student Opinions*, which examines various aspects of academic life at St Andrews, and which draws attention to the university's failure rate—the worst of any university in Scotland.

The booklet claims that one in three students in the science faculty fails after one year. It describes this figure as "staggeringly high."

Student Opinions also says that in 1973-4, even after examination results, there was a failure rate of 35 per cent of first year geography students with Scottish qualifications. This compared with no failures among students with the equivalent English qualification. Similarly, there was a failure rate of 23 per cent of students with Scottish qual-

ifications reading English, against only 3 per cent of those with the English GCE.

The booklet says that despite the failure rate, the university authorities seem reluctant to rectify the position in spite of student demands. It adds that the university blames the declining standards in Scottish schools, but the students refute this.

They say that the university's courses are orientated towards the GCE approach of early specialization rather than towards the broader-based SCE traditions. "The obvious trend for SCE students to fare worse than their GCE counterparts leads one to the unwelcome conclusion that there is a failure on the university's part to respond to the needs of Scottish students," says the report.

But the university denies any accusation of apathy. Last month a special committee set up by the senate in 1972, published a full report on student academic performance at St Andrews and called for further investigations into the relationship between entry qualifications and university first year performance.

Boycott threatened unless bus service improves

by Stephen Cohen

Bristol Polytechnic's new, multi-million pound campus just outside the city will be boycotted by students unless there is a regular bus service to it.

Students are also demanding that the development should not be until more hostels are built.

The £5m complex of buildings of Coldharbour Lane, seven miles north-east of the city centre, will be opened next month by Lord Crowther-Hunt, Minister for Higher Education. But Mr Richard Durrant, a student union official, said last week that a boycott of all lectures and tutorials at the new site had been called for.

"No transport is going to be provided, except for a country bus service," Mr Durrant said. "This is quite ridiculous."

Only one student village with room for 250 has been built so far. The building of more villages has been postponed until more money is available. Mr Durrant said that the campus should be kept closed until the villages were built and adequate shops and a sports hall provided.

"We have got a moderate student leadership," he added. "We fear that this might give the extremists a chance to gain control. We won't settle for less than our full demands."

Mr Michael Pascoe, the polytechnic information officer, said talks began going on with the Bristol Omnibus Company for four years. A sticking point was the £15,000 underwritten guarantee demanded by the company. If ticket receipts did not equal that figure, the polytechnic would be expected to meet the difference.

"We are trying to obtain authority from Avon County Council to agree to the terms of the guarantee," Mr Pascoe said. "We hope to get somewhere next week."

Lecturers at the polytechnic will be paid up to 15p a mile for the extra journey to the new buildings. Non-academic staff will get a discretionary allowance.—TES

Combined students' union formed at Loughborough

Loughborough University Students' Union and the Loughborough College have combined to form a new students' union. It will represent students from the university, the college of education, the college of art and design and the technical college.

With all Loughborough students now represented by the new united union, called simply Loughborough Students' Union, there are plans to build a joint amenities building which will be owned by the union members. About £700,000 worth of funds are available for this building and construction may begin before the end of this year.

Students at Loughborough were represented by one union prior to 1966 when a second union was formed by the university.

Saudi Arabia puts education second only to defence

by Frances Gibb

A block sum of about £9 billion has been allocated to education and manpower training in Saudi Arabia's new five-year development plan announced last week, according to an article in *The Economist*.

The plan, which involves a Government expenditure of \$143 billion (about £68 billion) between now and 1980, earmarks \$21 billion of this, about one-seventh, for education and manpower training. The amount places education second only to defence—\$23 billion—in the list of priorities.

Some 100,000 foreigners as well as 232,000 Saudis will be needed to implement the five-year plan. It is estimated that between now and 1980 foreign manpower in Saudi Arabia will need to be increased by 159 per cent.

It is estimated that the number of managers will have to increase by 97 per cent, professionals by 50 per cent, technicians and semi-professionals by 159 per cent, clerical workers by 288 per cent and semi-skilled workers by 159 per cent.

Mr Peter Chenery, regional officer at the British Council's Middle East department, said it was difficult to predict what Britain's share of the associated projects might be. "It is true to say, however, that training and higher education fig-

ures quite largely in the plan, and we obviously hope to get as much business as possible. There are lots of other Western industrial nations in the market, such as the United States and the Germans, especially on the vocational training side, so we just hope the Saudis will continue to look to Britain and that we will be able to offer facilities attractive to them."

The British Council's Paid Educational Services (PES) scheme was one way that Britain could meet Saudi Arabia's needs, he said. "PES, which is aimed at making a sort of integrated package response to educational needs, is one way they might approach us."

He emphasized, however, that it was a case of large numbers of Saudis coming to Britain, the operation would probably be handled by the Saudis themselves, independently of PES. "If, on the other hand, they want to institute projects for developing training centres, involving co-operation and British going to Saudi Arabia and vice versa, this is something that could be met by PES."

The British Council is already engaged in a film contract with Saudi Arabia to provide English language engineering and medical schools at the new Abdul Aziz University in Jeddah.

The teacher training connection

One of the first detailed histories of the relationship between teacher training colleges and universities has been published by the National Foundation for Educational Research.

The book is the outcome of three years' research sponsored by the Social Science Research Council and covers the antecedent conception and development of the Institutes of Education between 1922 and 1971.

The authors are Mr Derek Humphreys, former head of the department of education, Bristol University, and Mr R. Fairhurst, a former history teacher at Leeds Grammar School, and Professor Roy Niblett, head of the higher education department at the University of London Institute of Education.

Improve researcher prose styles

Universities ought to provide brief courses to help research workers improve their writing style, according to a recent review of research in early childhood education published by the Social Science Research Council and the National Foundation for Educational Research.

The review, by Dr Barbara Tizard of the London University Institute of Education, updating an account of research first published last year. It gathers together various suggestions from researchers about how communication between them and the public can be improved.

Suggestions include a "research interpreter" appointed to translate research ideas into an intelligible form and a research "think-tank" to help researchers communicate their findings effectively.

Mixed feelings on graduates in P.O.

While an able graduate usually outshines an A-level entrant, during selection and early career days the school leaver often has few preconceived ideas to unlearn and is more ready to accept routine day-to-day work, Mr Alan Brown, head of the Post Office Appointments Centre, has maintained.

Writing in the Department of Education and Science publication *Trends in Education*, Mr Brown points out that in terms of promotion there is little to choose between the levels of entry. However, over the years useful work experience has been at 21, compared to the graduate who could be in a better position for promotion.

He adds that by the time the two entrants are in their middle twenties these differences have evened out and opportunities for progression to middle management have opened up to both on the basis of merit.

Warwick arts centre

The new Arts Centre at Warwick University was financed entirely from private subscriptions, including an anonymous gift of more than £400,000 for the theatre. The THEs was therefore wrong when it said last week that it had been financed from the University Grants Committee building programme. The building, financed by the UGC was for social studies, and cost £1.3m.

The London College for the Distributive Trades, Newcastle Polytechnic, Heriot-Watt University and Edinburgh University strongly support the vocational purpose, while Bradford University and the University of Manchester Institute of Science and Technology gave it a low rating.

Mr Gordon Mitchell of Newcastle Polytechnic said the college was "strongly in favour" of emphasizing the vocational purpose.

Scientists say power limited on decisions

Most scientists have very little influence over the decisions made in their university departments, according to a recent study by an American sociologist. The decisions they were involved in were nearly always on what equipment to buy.

However, this seemed to matter less to British scientists than Americans, because British scientists were more secure, and led to expect to have a weak voice in departmental affairs.

Dr Jerry Gaston took a sample of high energy physicists and questioned them about who held power in their departments. He found that most thought they had no influence over appointments and promotions. These were usually decided by the head of department.

But the pattern varied in different universities. In London, for instance, scientists were most likely to be personally involved, and in the redbrick universities least likely.

Within departments, those scientists whose professor shared their subject interest considered that they were more involved in decision-making.

He also found that "scientific productivity" and the status given to a scientist by his colleagues were not related to their involvement in departmental decisions nor to their satisfaction with their power in the department.

Dr Gaston concluded that decision-making was a burden for many scientists. They were glad to be excused from it, since working on committees kept them away from their scientific work.

Autonomy in the research role and participation in departmental decision-making, by Jerry Gaston, *British Journal of Sociology*, June, 1975.

News in brief

Poly offers HND in materials science

A course leading to a Higher National Diploma in materials science is to be offered at Sunderland Polytechnic this autumn. Called HND Metallurgy (Materials), it is believed to be the first HND course in materials science in the country.

The two-year course has taken five years to launch, partly because there had been no suitable validating body. The joint committee for metallurgy has now agreed to validate the course.

Japanese visit Keele

A party of 45 university administrators from Japan will attend a special course at Keele University on how the university is administered. Their visit is part of a tour of inquiry into university administration which will include visits to France, West Germany, Canada and the United States. It has been arranged by the private universities union of Japan.

Building maintenance

A series of seven short courses leading to a certificate in the management of building maintenance will start this autumn at the Polytechnic of Central London. The courses, which are designed specifically for building maintenance managers may be taken individually and as a series. They will last between two and four days.

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Manchester to advertise 32 vacant posts

More than 30 vacant academic posts at Manchester University and four senior chairs at Oxford University are to be filled.

Senior officials at both universities have emphasized that the unfreezing of a few jobs gave no grounds for optimism. Universities were still saddled with stop-go planning and were desperate to know if the recurrent grant for 1976-77 would allow them any room for movement, they said.

At Manchester, 32 posts are shortly to be advertised. Mr. Vincent Knowles, university registrar, said that its size and its policy of redeploying posts that fell vacant had left the university still content reserves.

The posts will be mainly in medicine where Manchester has heavy commitments, including the servicing of medical graduates from St Andrews University. There will also be jobs in social studies and economics.

But elsewhere there has been no real change in the freeze, although a few jobs have recently been filled.

At Oxford, every vacant post is reviewed on its merits. Mr Geoffrey Caston, registrar, said that at the moment there were advertisements for chairs in Anglo-Saxon, Sanskrit, Interpretation of Holy Scripture, and exegesis of Holy Scripture.

Mr Caston added that the picture was still gloomy and that the size of the recurrent grant for next year would determine whether or not all posts would have to be frozen again.

● Oxford have made an appointment to the professorship of Egyptology which has been vacant for a year. Mr John Baines, lecturer in Egyptology at the University of Durham, and Laycock student of Egyptology at Worcester College, Oxford will take up the post in January, 1976.

Debate on equality in education has become warped, says Dahrendorf

by David Walker



Professor Dahrendorf: equality means more of the same.

Lifelong education had no meaning unless the boundaries between work and leisure, between a life and retirement, were redrawn, Professor Ralf Dahrendorf, director of the London School of Economics, said last week.

In the third of Peter Jay's London Weekend Television interviews with modern thinkers, Professor Dahrendorf talked about solutions to the danger of anarchy, the debate about equality and the need for flexibility in modern society.

Education was central in these discussions. Lifelong education was a guarantee that the potential of people was harnessed in a way that offered greater fulfilment and society greater benefit.

The debate about equality had become warped, however. Instead of more educational opportunity being offered, equality had come to mean being offered the same sort of thing.

In response to questions from Peter Jay, economics editor of *The Times*, Professor Dahrendorf elaborated some of the ideas presented in the Radio 4 lectures he gave last year for the BBC. He suggested ways that society had to be reorganised to preserve the liberty of the individual within the modern bureaucratic state.

Part and parcel of these changes was a "revolution" of labour. "I think we have made nonsense of the enormous possibilities that exist by having a long period of initial education for some, and a shorter period for many others. But in any case, having a period of initial education in which there was little involvement in practical things; of then having a period in people's lives in which, on the other hand, they're going to work and indeed, fight for shorter working hours, and fight for better working conditions, is sure, but for reducing this element."

On the other hand we have the leisure time period and while work is quite often over-determined—where people are told too much at their work place—the leisure

period is underdetermined and people are told nothing.

He advocated a system of vouchers that could be cashed in return for education throughout an individual's life. He praised those with the initiative to take a second job and those who worked after retirement.

Experiments in Sweden had shown that it was not impossible to run mechanised production lines on the basis of a new flexibility of labour. People would have varying responsibilities with a greater commitment to the whole of the product.

The trade unions were a target for criticism. Professor Dahrendorf said that a kind of national council could be set up to determine national priorities, say on wages and incomes. An individual's political rights as a voter for Parliament had somehow to be combined with his "organizational rights" as a member of a trade union or powerful interest group.

He wanted to put forward an alternative to a head-on collision between Parliament and the "big battalions", the powerful organizations of modern society.

'European differences hinder recognition of degrees'

by Frances Gibb

The major obstacles to mutual recognition of degrees and diplomas in Europe is that corresponding qualifications often do not exist, according to the Council of Europe's committee for higher education and research.

In a paper on "equivalence of qualifications" the committee says that the organization and content of primary, secondary and tertiary education in Europe vary greatly from country to country. Ancient laws and regulations, in such cases, supplementary examinations cannot easily be abolished.

The problem cannot be solved at one stroke, the committee says. It has therefore decided to concentrate on admission to undergraduate studies from one country to another, leaving aside mobility between schools, admission to professions and the use of academic titles.

A combination of legal measures, growing educational integration and improved information is needed, the committee says. It says that it is also more likely to be achieved if one kind of degree or diploma is concentrated on at a time, it suggests. EEC mobility has already

been achieved in the medical profession, with pharmacy, engineering and architecture expected to follow. The committee commends existing bilateral arrangements which contain precise commitments, such as those between Austria and Italy, and France and Germany. It warns, however, against taking the lowest existing level as a common basis. The council is currently preparing a publication of all existing bilateral and unilateral arrangements, it says.

National legislation would be the easiest way of dealing with the problem, but because of the ancient laws and regulations, national authorities and universities are thus often reluctant to recognize foreign qualifications.

A second obstacle is that national authorities, universities and private employers find it difficult to obtain reliable information on the exact value of the enormous variety of foreign degrees and diplomas.

In addition, certain professions also require their members to have knowledge of particular national laws and regulations. In such cases, supplementary examinations cannot easily be abolished.

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'We did not rebuff Open University on student transfers'

The Standing Conference on University Entrance emphasized this week that it had not "rebuffed" the Open University scheme to allow transfers between OU students and universities (THEs, August 8, 1975).

Although it had said that it was too early to give any general guidance, the standing conference was by no means trying to discourage applications from Open University students. Mr A. G. Hearnden, secretary of the SCUE, said this week. Schemes for transfer were being kept under review.

A letter to universities from the standing conference says that universities at present fit broadly into three categories on admission of OU students:

- those which, having had no experience of dealing with applications from Open University students had made no provisions;
- those which had attempted to formalize conditions of acceptability of Open University qualifications;
- those which treated such applications individually on their merits or alongside other submissions from "mature" applicants without normal school-leaving qualifications.

In view of the fact that the last is by far the largest category the Standing Conference considers it too early to give any general guidance on the acceptability of Open University course credits.

Public invited to attend undergraduate courses

Seven out of the 10 schools at the University of Bath, Anglia, Norwich, are to allow members of the public to attend selected undergraduate lecture courses from next term. Attendance will be free.

The lectures involved are concerned with the biological sciences, development studies, European studies, comparative literature, fine arts and music, mathematics and physics, and social studies.

Letter, page 10

Sociologists learn to make machines do the work

by David Walker
Social Sciences Correspondent

The whirring of the crickets on the green banks at Essex University is being drowned during six weeks of this summer by the sounds rising from the type machines on the computer terminals. Another social science data analysis summer school is under way, enlivening the campus with an international crowd learning how better to use the machines to aid their understanding of the social world.

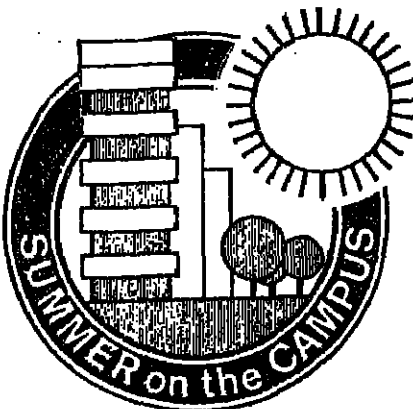
The director of this year's school is Dr Ivor Crewe, who runs the Social Science Research Council survey archive at Essex. Along with colleagues from the departments of government and sociology at Essex as well as members of the European Consortium for Political Research, which sponsors the school, Dr Crewe organized a six week session of lectures and seminars in areas like applied regression analysis, multi-level analysis and graph analysis.

Graph analysis could prove a useful tool for sociologists. Two Dutch scholars have recently developed the technique for looking at how the top men in a country interlock.

About 120 postgraduates, junior researchers and government researchers together with a sprinkling of older men who missed the great explosion in quantitative techniques in recent years have come to the school during July and August to learn more mathematics, statistics and computing and their applications.

They come from several social science areas but it has largely been political science research that supplied many of the problems that prompted a group within the ECPR—the Norwegian Stein Rokkan, Richard Ruse and his associates at Strachelyde, and the Dutchman, R. K. Makkink—to push forward the study of quantitative techniques and more rigorous methods of handling data.

Dr Crewe explained: "The impetus came from a younger generation of European political scientists not committed to empiricism versus theory or positivism versus critical thinking but who regarded the collection of data and knowledge about how to handle it as part and parcel



of more rigorous, logical, less amateur, less impressionistic ways of studying social phenomena."

The stage of "data analysis" comes after a survey has been made to find out opinions, and occupies the first two weeks of the summer school. The Essex summer school is distinguished from the annual survey methods school run directly by the SSRC. It is not "official" in the sense that only one of the participants received an SSRC grant for attending.

Dr Crewe and his colleagues are convinced there is a regular place for this kind of additional work done in the vacation. It brings isolated postgraduates together, and gives them confidence to face a computer centre in their home university previously used only by engineers and natural scientists.

The school is an international event. Sponsorship by the ECPR means that each affiliated department of politics can send two of its students by right; others pay the full cost. Economists, Dutch, Scandinavians and French come in numbers as well as smaller contingents from places like Greece, the United States of America and the Third World.

The postgraduate students tend to come with particular problems they have encountered, say, in their doctorate work. They are looking for some kind of technique that will help them solve it. The organizers hoped such tools were what they would take away with them.

Did all this argue for some mathematical education throughout social science courses? Mr Paul Whiteley, a lecturer at the school from Kingston Polytechnic—and one of the few representatives of further education—was not sure. He said that some changes in the way it was perhaps best to take up the few specific opportunities a social scientist needed when they were required. The school was aided in this by the lectures given by one of Essex's own mathematicians, Dr David Ferlie.

Some social scientists consider there is a danger in all this. Mathematics can be beautiful, even seductive and the pull towards ever more sophisticated operations away from the gritty reality of the crude problems and data of the practising sociologist or political scientist can be strong.

Dr Crewe said there was some danger that intensive teaching on a particular method of analysis could involve a divorce from "real" concepts but he said the joy of the summer school is that it could have a concentrated focus, providing lessons and interests to be taken back into term time's practical problems.

This year's school would be offering a diploma taken over two years, perhaps leading on to a master's degree in social science data analysis.

"I believe a social scientist is uneducated without statistical training," Dr Crewe said. "Such a course must improve his inferential reasoning. You could take a course in methods and never use figures again but the rigour of thought and logic is improved."

Dr Crewe's association with the SSRC Survey Archive has given the school a boost, too, in the shape of a small workshop on electoral behaviour using the material held in the archive run in parallel with the school.

Essex University offers participants in the school not only a fine range of outdoor pursuits and its "204 acres of fine parkland" but also the strength of the academics who have made the university a bastion of quantitative methods in the social sciences.

Concentrated mainly in sociology and government—the economists keeping themselves and their own mathematical sophistication to themselves by and large—Essex is one of the major British centres in this field.

Peter Hennessy at the first brass band summer school

The north wind doth blow

There is something larger than life about brass bands, an heroic element that transforms listener and player alike.

To describe the sound they make would take the talents of a professional northerner like J. B. Priestley, for the brass band movement is a singularly English phenomenon, evocative of mean streets, racing pigeons and chimney stacks accompanied by pure brass sounds pouring forth from grimy Co-op halls.

The brass band movement, like its infinitely less harmonious trade union equivalent, has an abundance of folk heroes and living legends. Several of them were assembled last week in the unlikely surroundings of Lancaster University to officiate at a unique occasion—the convening of the first ever brass band summer school.

Nearly 100 bandsmen and women spent the week on the fringe of the Lake District extending their repertoire and developing the mastery of their instruments. Like a football, Keynesian economics, trade unions and similar mixed blessings, brass bands are a British gift to the rest of the world. (His journals, the *British Bandsman* and the deliciously named *British Mouthpiece* have an international circulation that even *The Times* might envy.)

Norwegians, Swedes and Swiss were in attendance at Lancaster, though sadly there were no Antipodeans, which was surprising as brass bands are very much in vogue in those distant parts.

The school was brought together by Brass Band and Related Arts Summer School (BRASS) Ltd, a trust set up last year to "bring brass bands into the open" in the words of Dr Denis McCaldin, Lancaster's director of music. BRASS's list of directors makes very impressive reading, including as it does Sir Charles Groves, Lady Harewood and the greatest professional Yorkshireman of them all, Mr Harold Wilson.

The idea of a brass band summer school was conceived three years ago by Elgar Howarth, the well-known trumpet soloist and conductor of the crack Grimsby Rovers. Shortly after his appointment at Grimsby, Mr Howarth was asked by Granada television, who sponsor major brass band contests, what if anything the brass band world needed above all. "It seemed to me what was wanted was new, young, conducting talent," he said. "I'm very nearly 40, but I was



Harry Mortimer surrounded by sounding brass.

regarded as an infant prodigy when I was appointed to Grimsby." There were 13 student conductors at Lancaster doing "a spot of wagging" in Mr Howarth's phrase, under the watchful eye of the avuncular Sir Charles Groves of the Liverpool Philharmonic and the genial Roy Newsome of Black Dyke Mills.

Conductors must have a natural gift, said Sir Charles, "though they can develop their technique and ear. It's so much a matter of knowing how to get the best out of people, which cannot be taught really." But he made a valiant attempt, correcting the young conductors in the nicest possible way.

"Do it with swagger!" he exhorted one young man having a crack at Gilbert and Sullivan's *Iolanthe*.

The young musicians waxed lyrical about their week in Lancaster; 25-year-old Albert Sloan, a Salvation Army bandmaster from Port Glasgow who studied for three years at the Scottish Academy of

Music, spoke of the delights of playing alongside dedicated musicians. There were no passengers at Lancaster, he said.

Bandsmen often talk of the social side of their calling, the precious sense of belonging to a team. "Even if you're not a very good player, there are bits you can manage and feel important," said Mr Sloan. "Bands are part and parcel of a sense of community that endured intact in large tracts of industrial Britain until the planners and the sociologists got their hands on them."

The crowning event of the week was a concert in Lancaster's Great Hall. The programme included Elgar, Rossini, Fidelio, Gabriel and Bizet's magnificent, cornet solo "Napoli" whose melody has inspired a thousand vulgar librettists. It was a fitting climax to a seminal week.

Under the batons of Sir Charles Groves and the immortal Harry Mortimer, the 100 bandsmen gave of their best—all spitfire, puff and bravura.

Frances Gibb on the Gavin report on Open University academic staffing

£13m rise in OU spending by 1984

The annual average cost of a student at the Open University in 1984, when it reaches its target of 87 full courses, will be £375, according to the Gavin report on academic staffing published last week. This is estimating a student population of between 60,000 and 65,000.

At other universities the annual cost per student ranges from £1,160 at Bath to £2,405 at London (THE, July 25).

The report was produced by a joint working party of the Department of Education and Science and the OU, with the aim of examining the university's requirement for academic staff and to seek to establish criteria by which future requirements for such staff might be assessed. The chairman was Dr M. R. Gavin, former principal of Chelsea College of Science and Technology.

The breakdown of the expenditure in the steady state situation of 1984, with 87 full courses and assuming an increase in student numbers to 60,000, would be: central academic facilities, 20.8 per cent; regional and central academic support services, 13.4 per cent; broadcasting, 15.7 per cent; administration, 13.7 per cent; institutional services, 12.1 per cent; and direct student costs, 19.1 per cent.

The proportion of each of these sections, going on student costs, course-related costs and overheads, is roughly 50 per cent on student costs, 25 per cent on course costs and 25 per cent on overheads, the report says.

But to reach this steady state (which implies only a fixed number of courses, not of students), the uni-

versity will have to increase its academic staff by some 50 per cent. To reach its target of 87 full courses by 1984, full time academic staff at Milton Keynes must be increased by at least 100, to 331, and possibly up to 370.

The present staff/student ratio, counting 5,300 part-time staff as equivalent to one-tenth of full-time staff, of which there are 470, is about 1:63, compared with about 1:8 at other universities.

The cost of such an increase in staff, based on the average academic cost by faculty in 1975, will be between £3,143,000 and £3,817,000, the report estimates. The proportion of the OU's budget spent on academic staff will remain constant at about 28 per cent, however, between now and 1984.

Annual expenditure is estimated to increase from its present £11m to between £24m and £28m with a student population of between 60,000 and 65,000.

Full courses at the university total 43, with 12 planned for next year. Students are unable to teach honours degrees level in some subjects, notably science. The distribution of the 43 is: arts nine, social sciences eight, educational studies four, mathematics six, science six, technology six. Four other courses "straddle" more than one faculty.

The final allocation of courses per faculty in 1984 would be: arts 16, social sciences 17, educational studies 10, mathematics 10, science 15, technology 15, and university courses (which are interdisciplinary), four.

On regional staff, who presently number about 173 (full-time) the

report suggests additional provision will be necessary. It accepts that such an amount might be £200,000.

It notes that regional staff, as with faculty staff, have been overloading. "For the purposes of this costing exercise, it is assumed that the estimates understate the true costs of staff tutors and senior counsellors by 20 per cent."

Apart from the need to produce the 87 full courses, one main reason for the proposed increase in academic staff was that they had insufficient time for research. The report recommends a readjustment of productivity targets, which are based on the number of weekly student work units a staff member produces.

It urges more use of outside consultants in producing course materials and says the OU should try to build on this to try to improve staff productivity of academic staff.

Teaching time is about 50 to 60 per cent of time available, compared with 42 per cent at other universities, the report notes. "It is difficult to conceive that, on average, research will ever exceed the 30 per cent level in other universities as shown by the committee's vice-chancellors' report."

Other recommendations, which are to be considered by the OU and DES in October, are that staffing criteria for full-time posts in the regions should continue to be related to student numbers, and the OU's staff secondment and interchange scheme should be expanded so that the ratio of senior to junior full-time academic staff should remain, as at other universities, at 4:6.

Don's diary

An odd way to make a living

Monday

Four hours (there and back) in train to London for one hour discussion with vice-chancellorial colleagues on problems with Research Council funding in the universities. It seems grossly inefficient, the journey, I mean, but I get three hours work and reading done in the train which is certainly more than I would in my office.

Do some simple arithmetic on the 1957 Willink Report which persuaded the Government of the day to cut entry into medical schools by 10 per cent, and wonder for the hundredth time why an intelligent chap like Crowther-Hunt in lauding the virtues of manpower planning should give the training of doctors and the training of teachers as examples; two total disaster areas if ever there were.

Wonder why no social scientist has written a comprehensive account of why we got both so appallingly wrong when one could not find simpler examples to plan. Wonder why it is that with each new issue of the British Rail timetable the trains have got just a little bit slower, in view of the introduction of the Advanced Passenger Train with grave disquiet.

Read (in a review of the latest place of nonsense by the Club of Rome) "I have been in the field of social simulations for five years and I believe that the Croquet, which has regarded the Russians or 20 bad simulations." So there we are, folks, gut-feeling is the prophylactic against the bad trip.

Conclude reluctantly that the language in this example is not quite up to that found by Christopher Ricks in an American book on death—"those clergymen who favoured a 'meaning-integrative' approach (helping the bereaved to integrate the death event into a cognitively meaningful structure)". Rather glad that I am in the field of social dissimulation.

Tuesday

A work-day with meetings on all sorts of things including one on the position on frozen vacancies, now running at 8 per cent for the academic staff. What way to run a thriving institution (even though we weren't included in Bob Hunter's "centres of excellence")!

Wednesday

The university fate, pretty well the only occasion in the year when I see that my colleagues, of all kinds, have families: always somewhat surprising. My own (one-year-old) son runs true to form by trying to argue the toss with a roundabout, which promptly knocks him down: a truly confrontational learning situation, you might say.

Slightly disturbed, in a paranoid kind of way, to be told that one of the cockroaches in the cockroach races has been named after me. Is this wholly unconnected, I wonder, with the fact that the two professors running the races are in the medical school?

Thursday

London again, to help Derham Christopherson present the vice-

chancellor's "green paper" on post-graduate education in the press. His initial expository statement made in a masterly fashion, as was his batting and fielding of journalists' questions. One splendid moment when journalist asks him was he surprised at a particular recent ministerial statement. "Yes," he says, and that's all. "Always a bit disturbing to be given a direct answer to a direct question" the journalist mutters.

Then to take part in a meeting of the whole committee (of vice-chancellors) to meet Fred Mulley and Crowther-Hunt. The vice-chancellors on this occasion present extremely well all the essentials of the university case and the really serious difficulties we now face, but one could not honestly say that a meeting of minds had taken place.

All this confirms the belief that has been fairly rudely forced on me in the last year or so that the universities have a really massive job of public education to do, at all levels. We aren't very well suited for it and it will take up a lot of time, but it is a job which has to be done. Perhaps we should produce a tastefully glossy annual report. The ad-man cometh and the spirit shrinks.

But perhaps the simple explanation of the case may not be enough. One who was in Prague when the Russian tanks moved in could not be that the Croquet, who has regarded the Russians or 20 bad simulations. So there we are, folks, gut-feeling is the prophylactic against the bad trip.

Read in the train for the umpteenth time A. E. Housman's 1952 "Introductory Lecture" at University College London, perhaps the best defence of scholarship ever written. What an absolutely marvellous prose style Housman has: little wonder that E. P. Powell got from him one of his better phrases—"the arsenal of divine vengeance"—though Housman was referring to the Bodleian while Powell was something quite other in mind.

Such are the times we live in that one has to be careful about that word scholarship ("please adjust your word before using"). I suppose we are not quite at the point yet where we have to take seriously Johnson's description of the scholar's fate:

"Toil, envy, want, the patron and the jail".

Not many of the academics I have known have ended up in jail, and then it was usually for a crime of conscience: but toil and want and others are still problems, even though the Patron has now become the People.

Friday

Catch up with the week's work so that I shall be in reasonably good shape to get back on the treadmill next week. Finish dealing with the 68 letters that have come in this week, mercifully fewer at this time of year.

Saturday

Out to cottage in the Black Mountains and, as I watch a kestrel working on a chimney, I am reminded (can I learn anything from him?) of that that was the week. Typical? Well, not quite; because there were no formal university meetings since we are in "vacation". Constructive? On balance, yes is the slightly dazed answer. Some problems solved for some people, some created for others. Some small steps taken in preventing a number of dangers which have begun to appear on the universities' horizon, and some constructive moves on the research front.

But it's an odd way to earn a living.

Alec Merrison

Dr Merrison is vice-chancellor of Bristol University.



"The so-called planning of doctors' education has ensured a national shortage of them: the planning of teacher supply has been a farce."

'Many will be told they can take a course provided it is useless'

The whole point of the James Inquiry was to assimilate teacher education into higher education generally and thereby remove the special disabilities under which the training colleges worked for more than 100 years. In attempting to maintain and even increase its detailed control of teacher education in a new situation, the Department of Education and Science is betraying the whole exercise.

Furthermore it is threatening an extension of centralism that has not a shred of justification in its past record. The attempt to limit a quota determined in London the number of student teachers in every college in the country is wrong in principle as well as in detail. It should be frustrated and it should not be difficult to unite universities, local authorities, the teachers and the students to this end.

The DES is drunk with the success of its policies for the colleges of education. Opposition to them has generally failed because it has been conservative, misdirected and unrealistic. Radical change is necessary: there must be mergers and closures. A student numbers in teacher education courses must decline. Only if we accept all this are we in a position to be effectively critical of present policies. Unless we do this we are assuming the proportions of a major scandal.

The Secretary of State has especially strong powers in teacher education because Parliament considers it necessary to have strong central powers to ensure an adequate national supply of school teachers. If the Secretary of State attempts to use these powers for other purposes he is abusing them.

At the present time he is attempting to use them as an instrument of general higher education policy. He ought not to do it and if he persists in trying he will find himself in deep water.

There is a case for giving higher education policy to policy for ensuring a supply of highly skilled man and woman power. The greatest single fault of the Robbins report was its casual dismissal of this case, coupled curiously with a facile acceptance of it in certain fields: those in which it was already established, notably medical and teacher education.

The Robbins doctrine, still the basis of national policy, was to provide higher education for those able to profit from it, regardless of subsequent employment prospects. While ostensibly maintaining this policy the DES is steadily extending the vocational fields in which it attempts to limit student numbers by quota based on manpower demand. The bastard policy that this implies has a consequence that must not be made explicit.

What the DES does is its estimates of the need for places, based on identifiable manpower needs, it arrives at a total considerably less than the number of places based on the other concept, that of student demand for places. The ultimate consequence of this thing, the prescription of a limited number of places with clear vocational objectives, the remaining students will be told that they can have a higher education on the condition that it is not directed to a vocational end.

To put it more starkly, many students will be told that they can take a course provided it is useless. This is the worst public evidence of this lies in the failures of the past. The so-called planning of the educa-



ERIC E. ROBINSON

of a government claiming to attach great importance to vocational planning in higher education while insisting on the deliberate expansion of non-vocational and even anti-vocational courses. This is not more speculation. It is happening and is growing.

For years past many would-be medical students have been taking, as a second best, degree courses in biological subjects with no clear vocational objectives and even little vocational relevance. But Mr St. John Steves and Lord Crowther-Hunt have specifically and generally deplored the idea of a large expansion of liberal arts education while the policies for which they were responsible implied such an expansion.

It is not generally realized that whereas ministerial statements on this usually imply a desire that colleges of education should diversify into other types of employment and if other forms of higher education had a higher generic vocational value the problem would be less critical.

If we conceive of the education of teachers, doctors, social workers, administrators and engineers in a narrow technical way, that is, closely limited by existing practice and prejudices in the professions, we have two problems. We inhibit professional flexibility and adaptability and we have to gear supply closely to professional demand.

A doctor or teacher too narrowly trained is a blinkered specialist and is fit to do no other job. If we change the curriculum to remove the blinkers we not only produce, conceivably, better doctors and teachers, better able to relate their work to the rest of the community; we also produce people better able to adapt themselves to other jobs. Then the possible oversupply of doctors and teachers is less problematic.

I would go further. If we set the education of doctors, and teachers right in this sense they would be more valuable in other work than liberal arts graduates. The education lobby has opposed the Government's policy on teacher education places on the wrong grounds; it has been too ready merely to play the numbers game and has failed to challenge the rules. The starting point of the challenge to the forthcoming education should be that it will be a national disaster to have too many qualified teachers in 1985 or 1990.

On the contrary, if their education is well planned they could be a much greater asset to industry, commerce and the public service than many of the purely academic and liberal arts graduates that the department is constraining us to

ensured a national shortage of doctors. The planning of teacher supply since the war has been a farce; the department has without exception always been wrong, about numbers and about curriculum.

There is no available evidence that the people who make the effective decisions about courses are competent to make them but there is much contrary evidence coupled with a long track record of wrong decision and unenviable achievement.

Their basic failure is a misunderstanding of the role of government and administration, which is not to make detailed local decisions but to establish policies and incentives which command respect.

The simplest thing the department can now do to establish respect is to stop telling colleges what they cannot do and to start telling them what they can do; and even more important to tell them for what positive actions they will get some help and some encouragement.

Two other things would help: an indication that quality of achievement would earn some recognition and some assurance that decisions given by the department would be consistent with the public statements of ministers.

The resolution of the dilemma posed by the concepts of student demand and manpower demand was provided by James. It was the fact that if vocational education were less blinkered and more generic the problem would be greatly reduced and there would be positive vocational benefits; if the education of teachers were valid as a generic education for other types of employment and if other forms of higher education had a higher generic vocational value the problem would be less critical.

This September for the first time a large number of students will enrol for the Diploma in Higher Education courses. Most of them will want to proceed to graduate in 1978 and most of them will want degrees that give reasonable employment prospects.

Many of them in the summer of 1977 will be interested in proceeding to take degrees in education, social work, administration or business but they will be told that they can take a degree only in liberal arts.

This is a scandal. It is not the responsibility of the universities, the college or the local authorities. It rests firmly with the DES and its acolytes in the inspectorate. The relevant papers are the unpublished minutes of secret meetings of the inspectorate that are filed in Elizabeth House.

I believe the Ombudsman or a parliamentary committee will eventually call for them for such is the obduracy of the department on this question that nothing less will shift it. Would that *The Sunday Times* would find such an issue worthy of front-page treatment in place of the adulteries of the *Bloomsbury* set.

The weakness of the DES position would be clear if the veil of secrecy were lifted if only because its attempts to relate educational provision to manpower need are based on the most primitive methods.

The clearest public evidence of this lies in the failures of the past. The so-called planning of the educa-



Patronage or policy in staffing?

Departments of extra-mural studies cannot fulfil their primary function—that of taking the university to the people—without the cooperation of the staff of internal departments. Extra-mural programmes are planned on the assumption that at least some internal colleagues will be willing to participate as tutors.

Yet as the demand for university adult education grows there is no formal mechanism to ensure a similar growth in the number of part-time university staff willing to undertake this work. In consequence a large percentage of extra-mural classes are undertaken by non-university part-time tutors.

The annual report of Liverpool University Institute of Extension Studies reveals that of the 37 courses offered in 1973-74, 115 were undertaken by the full-time extra-mural staff, 142 by non-university part-time staff and only 99 by members of internal departments.

The complement of full-time academic staff at the university amounts to some 900. The contribution by internal departments to the staffing of extra-mural courses is, therefore, less than 9 per cent. Liverpool is fortunate in having a large extra-mural department. In universities with small departments and equally large programmes the position may be even more worrying.

Given the situation in which the burden of teaching extra-mural classes is being increasingly carried by non-university part-time staff there is clearly a danger that this work will lose some of its unique character if it trend continues.

A university lecturer enjoys many advantages over the typical non-university part-timer. Working in a context of research and experiment it is easier for him to keep up with his subject, especially if, like astronomy, or psychology, "keeping up" becomes that much more difficult the more one is separated from a university context.

Of equal if not greater importance—as far as the benefit to adult students is concerned—is that the university lecturer is in a position to harness for the class the resources of the university in a way quite impossible for the average part-timer.

While recognising the desirability of involving more members of internal departments in extra-mural work, the problem for those charged with carrying this out is that they have very few levers to pull. The professional relations between internal and extra-mural departments are generally so casual and informal that the extra-mural department has no guarantee from one term to the next of the number of internal colleagues available to participate in programmes.

There are no legal or even strong moral constraints on internal staff to offer any sort of contribution to extra-mural studies. The problem of recruitment is therefore one of the most difficult that the extra-mural organiser has to face.

The problem is compounded by a moral aspect—seldom discussed—which the conscientious on both sides find unsatisfactory. For regardless of the angle from which one views the working relationship between internal and extra-mural departments, the present recruiting procedure amounts to a rather crude patronage situation in which some members of internal departments are "favoured" while others equally talented are consistently ignored.

Universities are, however, for all sorts of patronage, but the danger with the kind exercised by extra-mural departments is that it can intensify damage the personal relations between colleagues.

Tom Costello discusses the problem of finding staff for extra-mural studies in universities

Tutors who prove successful with extra-mural students tend to be repeatedly invited to undertake classes either because of their success, or simply out of sheer habit or convenience. Newer or "unfavoured" members of staff may feel that a closed-shop situation exists and consequently become discouraged from involving themselves in extra-mural activities.

If the numbers of internal staff recruited to extra-mural work is to improve, then solving the problem raised by patronage may suggest one way of doing this. Each department should designate a member of staff to liaise with the department of extra-mural studies.

The very existence of such a role might generate a dialogue about the nature of extra-mural work which could lead to a new and more vital interest on the part of internal colleagues. From the viewpoint of internal departments the link-man could ensure that fairness prevailed and that no one was either too burdened with extra-mural responsibility or unjustly overlooked.

More importantly in accepting the notion that a more formal relationship should exist between internal and extra-mural departments, the former might also begin to accept some responsibility as a department for providing extra-mural opportunities and controlling the quality of extra-mural teaching.

A more radical solution to the problem of staffing extra-mural courses would be to include in the contracts of all university lecturers a clause requiring them to offer up to 20 lectures a year to the general public. "If required by the director of extra-mural studies and agreed by the head of department."

It would be understood that over a five-year period each internal department should make (or offer) a contribution to extra-mural studies which could be detailed in the annual report published by the university senate.

Obligatory service runs against the grain of the voluntary ethos of English adult education. Yet the very fact that one suggests it is an indication of the seriousness of the plight in which some extra-mural departments find themselves.

In having to make use of so many non-university part-timers to staff even popular subject areas such as English, history and philosophy, there is a danger that university standards will be eroded and the public offered something which is distinctly different from university adult education.

The effect of this on the public evaluations of universities as a whole is bound to be deleterious. If students find themselves consistently in the company of tutors whose contact with the sponsoring university is only slightly less tenuous than their own, they will ultimately feel a sense of academic betrayal.

Legally enforced service is not a desirable solution, but when we recognise that even today there exist large and important universities, such as Lancaster and Reading, which do very little for the general public at the extra-mural level, one begins to see how easy it is to remain inactive in relation to non-vocational adult education.

The advantages of contractual commitment (apart from ensuring that a higher proportion of internal lecturers involved themselves in extra-

mural work) would be to put an end to the patronage situation. This would only come about however, if the problem of remuneration could be solved. University internal staff are normally paid out of University Grants Committee funds, whereas the fees they receive for extra-mural work derive from the Department of Education and Science.

It appears reasonable to pay internal lecturers a DES fee for extra-mural work if they are already fully discharging their UGC obligations. Equally it is reasonable to expect full-time extra-mural staff to do some internal teaching if part of their salary derives from the UGC.

This dual system of funding suggests how the staffing of extra-mural courses could be placed on a firmer footing without the necessity to resort to contractual obligation. It merely requires the modification of current funding practice so that both internal and extra-mural lecturers are placed in a comparable relation to the two main sources of income.

The DES should agree to pay an element of all university academic salaries, thus ensuring that all lecturers were funded to do some DES work (i.e. non-vocational adult education). This scheme need not be an automatic and blanket one. It could operate on an opt-in or opt-out basis, thus preserving the voluntary element.

Lecturers would elect to opt for the DES increment and commit themselves to, say, a three-year period during which they would be expected to do a certain amount of extra-mural teaching. Alternatively they could opt out and have their name removed from the panel of part-time lecturers.

Should the number of options exceed the needs of the extra-mural department, then internal departments themselves could make use of these by engaging in varieties of adult or continuing education as suggested by the recent joint working party of the Committee of Vice-Chancellors and Principals and the University Council for Adult Education.

The option choice would come to represent an open declaration by university lecturers of a desire to engage in contexts of university education other than the standard three-year degree.

It would give a tremendous boost to university adult education by making every department and every lecturer conscious of a responsibility to a wider public than those enjoying the benefits of a mandatory grant. Such a system of funding would continue to ensure that university adult education grew out of the enthusiasm of individual lecturers.

Unlike the present system, however, it would also ensure that every university could make a contribution to adult education so that the idea of a university without an extra-mural role would quickly become an anachronism—if not an impossibility.

The need to involve more internal staff in the work of extra-mural education is an urgent one. If we cannot effect changes in contracts or funding to occur overnight there is still another way open to universities to encourage wider staff involvement.

This is to offer formal recognition of the value of extra-mural work by making such involvement one of the criteria to be taken into account in considerations for promotion, tenure, passing the efficiency bar or promotion.

Tom Costello is a lecturer in literature and organizing lecturer for the West Cheshire University of Liverpool Theatre of Extension Studies.

David Coward puts together a new version of French literature and history in the Middle Ages

Dark ages, pillages, sausages and all that

Originally not many people lived in France. This was soon changed as a result of Caesar's Phallic Wars. Julius personally made eyes at all the ladies (omnis unquique) after capturing nearly everybody in one foul swoop. In fact, the population was so small that he was able to divide it up in *tres omnibus* and ferried everyone from one place to another.

This policy of *luisse ferru* was entirely successful, though the war soon developed into a slogan match. In several, it was called something different just like everywhere else. It was named Gaul by the Romans who divided it into three parts, viz. the *langue d'oïl* and the *langue de l'oc*.

France proper began when the Romans went home to undergo the collapse of the Roman Empire. It was as well really that they went when they did for as it is the Vulgar Latin they spoke left an indelible mark on French literature which is well known for its fondness for naughty stories such as *Madame Ovary*, *Bawdydiale*, *Thaigis*, and *Chénier's fables* (not to be confused with Marivaux's *Legs*).

For many centuries, there was no literature—French literature begins with the *Canilone de Sainte Eulalie*, sometimes known as the *Ullidae de Sainte Edilene*. As the title indicates, this was concerned with religion, an entirely appropriate start for a nation so renowned for being Catholic.

Subsequently there was no literature again. However, they had stopped being called Frank and were now all called Norman instead, save for William the Conqueror, the author of *La Vie de Saint Lagerdmain*.

The next landmark of French literature is the celebrated *Chanson de Roland*. Roland was a troubadour famous for singing songs, and one song in particular. He also played an elephant but on one crucial occasion failed to play it loud enough.

The royal war was travelling comically in an army but at the time some miles to the north of Rome. Roland had carelessly fallen into this valley entirely filled with Old French brambles and was not feeling at all well. "Moult est Roland sic (sic)." He was found by the king's elephant, but the king did not explore here, had also fallen into these bushes and died there with him.

It is a fine story, though rather long. According to one version, the king did indeed hear an elephant but, misled by the wiles (or mizzled by the wiles) of Turnip (root of the evil-doer), made the *geste du roi* and continued on his way. This *geste* he had learnt as a boy not from a harpist but a blacksmith.

The church played a dominant role in the society of the time and actively encouraged various styles of architecture, such as Gothic and toothache. Cathedral had symbols on the outside and knives on the inside. All bishops had crooks in the palms of their hands and prayed on Sundays and

High society was thoroughly corrupt, of course. The story of *Heloise and Aberrant* suggests it was only after his forced conversion that Aberrant proved to be exceptionally good, eminently moral in fact.

Furthermore, the *duc de Berry* kept Very Rich Whores and dressed in what was considered a rather effeminate style and his chums (for example, the *roy Lothario*) were, for this reason, called "patricius". Young ladies were dis-

tinguished from young men only by the fact that the former had wimples and the latter had plumpes. French literature was increasingly written in a sort of French (called "romans"), a tiring business which left many authors quite vernacular.

Although it is too early to speak yet of the appearance of the *homme de lettres*, we must speak of a much dominated society. How refreshing therefore to find a woman writer at this point. The *Lies of Marie de France* are of course quite untrue but they are nice nonetheless.

After a while, however, the French wearied and discovered that he had run out of things to write about. So they became interested in Arthur, the owner of a chocolate factory in Devonshire (England) and puritanical King of Nuxes.

King Arthur always ate his chocolate at a round table so that no one would appear to be taller than anyone else. Although very short himself, he was extremely athletic, once winning a prize for pulling a sword (called "Expurigator") out of a stone where it had been carelessly left.

Very few Frenchmen bothered to read these stories since they were written in appalling French and were full of bad spelling. They also found difficulty with the syntax, a tax paid by those wishing to do sinful things and read still books: those things the first could rarely also afford the second.

There was some drama, but since it was all extremely moral, extremely inhumane or thoroughly mysterious, we simply refuse to speak of it. But poetry (thirty?) Some was pure and some was not so pure.

An example of pure poetry is provided by the *Chanson de l'oc*. This was sung by minstrels to ladies sewn up in canvas bags by their lordly husbands before the *duc* said husbands went off to the Crusades.

Another *geste du roi*

There were other kinds of poetry, much of it written by Charles d'Orléans (anglicized Charles of [or from] Orleans) who once died from thirst near a fountain. Villon was quite as villainous as his name suggests.

In real life (i.e. even apart from being a poet), he was terribly reliable and is possibly the first of the famous French Cads. He was a typical product of the medieval university being clever but unemployable.

If further proof of his dastardly nature is required, suffice it to say that F. Villon was keenly interested in Scottish tree dancing (the so-called *Dance MacArthur*).

The Middle Ages produced many celebrated personages, among whom we remember, in order of height, *Huge Capet*, *Carous Magnus*, *Hovis* and *Pepin the Short* (who were all, incidentally, posthumously buried in a *fleur de lis*, or flower bed). But the most famous of all was *la poubelle d'Orléans*.

Joan of Hark listened to voices, though many, said wrongly that this was visions of the miraculous. However, after a day spent harping on hearings, the king agreed to listen to Joan who had been expelled. Though wounded in the leg, Hopalong Chastity, as she had come to be called, inspired the French to a glorious feast of arms at the

Most people were by now heartily sick of the Middle Ages which had gone on for far too long. It was agreed that it was time to turn the middle to end and for the new king of the end to start. A new dawn was blowing, piercing the gloom of the Dark Ages with the impact of a scorching sausage in a cellophane, sivey and rippling. The Middle Ages were over, medieval studies could now begin.

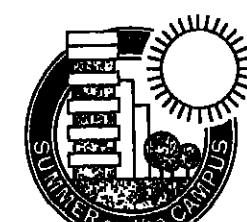
The author is a lecturer in French literature at Leeds University.

Now I am forever changed

Open University summer schools are in operation, bringing a week's full time study to

30,000 students.

Robin Mead, right, and Judith Grundy give the views of student and observer



Beginners, please

Keele University is running two of the foundation courses—in arts and social sciences. This makes it unrepresentative of summer schools as it has no second or third year courses and most of the students, therefore, are "freshers".

In previous years the social studies foundation course has been organized on a one-subject-a-day basis, that is, one day on psychology, one on statistics, and so on. This year the course, "Making Sense of Society", has been arranged into three modules, each lasting two days, "each an interdisciplinary exploration of a particular facet of society".

Module 1 is concerned with "Housing Problems and Policies" and concentrates on the housing situation in Stoke-on-Trent at the local level to enable students to put it into the national context.

One student said that, interesting though it all was, "we had a Marxist leading our housing group—which nearly led us all to give nationalization as the answer to the problem".

The second module was on "Women in Society" and, as was to be expected, aroused the most lively discussion. One male student passed judgment on the module before it even began as "a sheer abortive waste of time; this does not relate to anything we've been doing in the last six months".

A very active session with all students vying to speak, was on "Images of Women", in which groups of seven or eight students evaluated for stereotyping magazine advertisements for men and women, and analysing the dominant qualities of the actors portrayed. Women were much more sedate than men. Finding much more to analyse, and to resent, in the advertisements.

The final session, a spinning up of the work done in the module, including a discussion on God's sex, in which a minister, when challenged by someone claiming that the writer of Genesis portrayed God as a male, roared back in a deep from-the-valleys Welsh voice "No! He is not!".

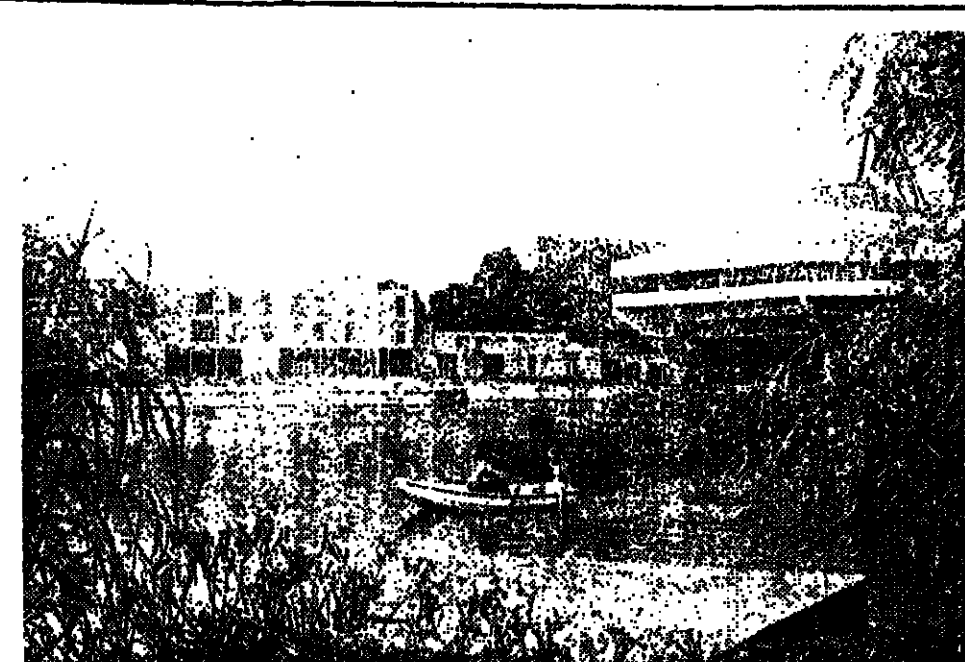
All the married men in this group, without exception, avowed that their wives were very happy to remain at home and not go out to work.

The leader of our group had a much easier time than one of his colleagues who had to contend with a Roman Catholic priest who, after managing to restrain himself for two hours, eventually could bear it no longer and treated the class to a lecture on the proper function of woman as handmaiden to man whose primary reason for being was to produce.

The final module was a "Simulation of an international situation" much like the game *Diplomacy*. A crisis game about power, each student was assigned the role of one statesman involved in the Boerian crisis of October, 1908, to March, 1909.

The student was not to try to be the statesman, but himself within that position. Like *Diplomacy*, many students found that this particular exercise dragged at first but became much more enjoyable the longer it went on.

At first it is rather daunting trying to speak to Open University students—their conversations are so far from the typical of the CMA and TMA (computer and tutor marked assignments) and numbers, D101s, A100s and M303s (course indicators).



Some aspects of life during summer school at York University

Photograph by Robin Mead

To the woods

"The summer school offers a variety of other activities—not all of them wholly academic—in which many students and staff will wish to participate"—from the introductory page of the Open University's handbook for students attending summer schools at the University of York.

Dubious delights? Well, at the start anyway, they are usually all so serious. And the "other activities" look like amounting to nothing more than a couple of discos and a two-hour tour of York.

There are mutterings of revolt, for now that the OU has scrapped the system of assessing students at summer school it is possible to feel that one is merely spending a week waiting for the attendance certificate which local authorities demand when contributing towards fees and expenses.

But if we don't know what we are doing at summer school, our friends and waiters back home certainly think they do. They may not have read the advice on sex and summer school in the OU student magazine, *Sesame*, but when it comes to "other activities" their imaginations run riot.

"Summer school, eh?" they leer. "You'll be all right there." Nudge nudge, wink wink, say no more.

Bird identification panel can be found on Spring Green Bridge—notice on the campus of York University.

Can the nudgers and winkers have been right after all? No, the birds turn out to be a collection of waterfowl tended by the chemistry department. York must surely be one of the most beautiful universities in Britain, built around the shores of a lake in the grounds of a stately pile called Heslington Hall, now used for offices.

A mature garden of yew trees... waterfalls... the geese and ducks popularizing the same (ach setting up a bad example by inter-breeding) it is all very different from a previous unhappy year at the University of East Anglia, which somehow managed to convey the atmosphere of an open prison.

The only snag at York is that you cannot possibly send home any postcards, for they all contrive to make it look more like a particularly attractive holiday resort than a university.

"I have been noticing the way you walk"—OU student (male) overheard addressing OU student (female).

It was worth trying, I suppose; but can romance really be stirring to blossom among fellow-students? We look such an unlikely lot, on the Arts courses the students are predominantly female and middle-aged.

We are split into groups of 11 students, sharing two tutors, and perhaps my group is typical: three males (myself, Mick, and an elderly gentleman who is having trouble with his hearing aid), and eight females (five largely inarticulate middle-aged mums of the *twinst and Woman's Own* variety, two young student teachers, and a quick-witted and loquacious Scotswoman).

Some of the groups have a younger bias, of course, and over on the other side of the campus there is a Technology summer school with a predominance of males. Now it is time for the Technology should ever come together.

It is hot, very hot. We try sitting outside for tutorials, but the geese tend to wander over and join in. Our tutor emphasizes the

informality of the occasion by taking off his socks and hanging them over the back of his chair.

"You don't teach at the OU for the money, that's for sure"—OU tutor and counsellor during the coffee break.

As they are paid at a rate which assumes that mulling an essay takes half an hour, it is hard to disagree. They do not get rich by teaching at summer school, either—and the hours are long enough. But perhaps that is the real value of summer school for the students—the debates and discussions which go on, far into the night, in the bar or out on the lawns, and in which tutors join enthusiastically.

"Unfortunately there is a conflict, and none of the tutors can be present"—embarrassed OU secretary before a repeat screening of one of the TV films connected with the course.

Conflict? Are they fighting out there? It does seem possible, with such an arbitrary programme and some apparent disagreement over who is lecturing on what when it comes to the special lectures which we have a choice of attending later on in the week.

Some students confide their analysing of *Middlemarch* has all concerned they will never open it again; flick wonders of tongue-complete with pencilled notes about the individual charms of local professional ladies, a distinctive piece of OU graffiti has appeared: "Mrs Cadwallader—Middlemarch 69".

"I'm going out with a T100 tonight"—attractive young woman Arts student.

It had to happen, of course; those technology males are after our females. The first of the two weekly discos has all the inter-communal tension of *West Side Story*, with T100 (technology) and A302 (arts) males competing for the favours of the young student teachers, who are having a field day.

But the barriers are undoubtedly being broken down. Couples who have probably never done anything livelier than a quick-stop before seem to be enjoying something called "The Frug".

There is even a move, by some holder spirits, towards the coupe of yew trees. Can *Sesame* have been right after all?

It has been scotched, but after summer school is over forget it!—nocturnal voice from amid the yew trees.

Now there's a sensible *Sesame* reader for you—for it is a sad fact that summer schools can, and do, break up marriages. Couples who have seldom, if ever, been parted from their husbands or wives before are thrown together in fairly close circumstances for a week in which they are supposed to work hard and often choose to play hard too.

Nothing can be done about it, of course. You can't actually separate the sexes by force, or mount morality patrols to tour the campus and bedrooms. It just calls for common sense. I deal with the situation which can occur as people struggle to face up to situations, actions, and emotions with which they may be unfamiliar.

"He kissed me last night", the girl who went out with the T100 confided to a woman in my group. "Do you think I should tell my husband when he gets home?" Tally, one wonders whether *West Side Story* has a special department for dealing with enraged husbands.

Perhaps some students meet the love of their life at summer school; others do "forget it" as soon as they return to home and reality. And the majority, of course, never get far as far as love goes, even the disco—but spend their time reading or talking to other students in the faintly rarefied air of a university campus.

"I'll answer any questions, but I hope that the only one will be 'Which is the quickest way to the bar?'"—OU lecturer.

Not an alcoholic, but someone who had just spoken for an hour to students packed into a lecture room where the temperature must have touched the mid-nineties. Special lectures like this are very popular at summer school, and perhaps indicate a range of interests beyond the fairly narrow confines of the courses which are enforced by lack of time and impending examinations.

As the week progresses and we learn each other's strengths, weaknesses, and personal foibles the tutorials become fun and the discussions animated. I take it all back—one's fellow students are a delight.

The weekend brings with it a sense of anticlimax, and even loss. Have we really got to leave York, and rejoin the real world? Lark. You have shown me the Love Country. I have tasted its sweet fruits, quaffed gently its gentle rills, breathed its arpeggial air. And now I am forever changed, stone in love with you!—advertisement in the personal column of the current issue of *Sesame*.

© Robin Mead 1975
Robin Mead, who writes regularly for The Times, is a fourth year Open University student.



Senate House, right, and the School of Education, University of Liverpool





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Editorial conference

Short? In the *THES*? OK, it's August and they're all on holiday or busy selling themselves to the Arabs—but you must be joking. Can't we do something about the building programme, or manpower planning, or the binary system, or the wickedness of the DES, or overhead projectors as an aid to better lecturing? Nobody said anything on those last week.

Sex at Open University summer schools—that would make a light August piece. ... But Denis Howell did make that statement about universities as centres.

If it's that bad, surely we could do something foreign. There's those reforms in Sweden. Sweden's doing it already, Crowthor-Hunt, or some thing like that. Or what about the International Association of Universities conference in Moscow? We said last week that there were going to be 1,000 senior university academics and administrators taking part—and they're discussing "Higher Education in the Approach of the Twenty-first Century." We write about that nearly every week.

Yes, but they're discussing "Higher Education and Problems of Economic and Social Development" and "Universities and Innovations within Higher Education." We write about them nearly every other week.

What about women then—we had all those reports last week from Korea, Sweden, France, New Zealand and the United States. Leaders of the strong and strong of women still deprived—universities still not doing enough. Look at America—that sort of line.

Not again, it's getting boring. And I'm certainly not writing it. What about salaries? That's the CAA? Or that letter about the freedom of speech for polytechnic directors? "Come off it, Laurie, or Edwin, or Arthur" or something controversial like that.

We've got three and a half pages of advertising this week for a year in August. Don't duck the boat. Air-conditioned offices and 20 per cent—or the dote queue. Take your pick.

That's it—"Scrounging students on the dote." Aren't there 30,000 of them? We used to do jobs. They're idle now.

We're not the Daily Telegraph yet. Even *The Guardian* had a go at them the other week. Students, students, students. Can't we forget about them for a year?

What have they got to do with higher education, anyway? Let's wait till they start squinting. OK, so what would you say about sport? Something feeble about healthy minds in healthy bodies, I suppose.

You lefties are all the same—always sneering at the old-fashioned British values. What about Russia? Olga Korbut. And those East Germans on the telly last night. They all seem to be very sporty.

So does the United States. Surely you're not going to say that

Denis Howell was right—all that stuff about developing sporting centres of excellence at universities and colleges. ... Loughborough—and St. Luke's and Carnegie. Aren't they supposed to be good for sport. But they're colleges. Surely you're not going to suggest sport at universities. That will just confirm their opinion of us at Oxford and Cambridge.

Fallen right into the trap! Bonister, Chataway, Brushier, May, Cowdrey, Dexter, the boat race, Twickenham. ... Can't tell you're over 30.

But can't you see—Oxford and Cambridge, our greatest universities—and they're good at sport, too. They actually encourage it. Some of them get degrees, too. And the towers invented training, more than a hundred years ago—retirement into seclusion to train together and all that. Training was invented by universities. It's a perfectly respectable subject, even it was November.

That won't fill two columns. We can spin it out beyond that. Universities and colleges have acres and acres of sports fields—and magnificent sports halls. Who's using them this week? I bet they're nearly empty. We could put in a strong argument for more use of university and college sports facilities by the community. That's a magic word, that community, nowadays. Universities must help the underprivileged, that sort of line.

As usual, though, we are concentrating on administration. What are they going to study? How would you present it to the CNA?

That's easy. An inter-disciplinary, multi-disciplinary course, with a DipHE exit for those who fail to qualify for Britain by the time they are 21. Degrees in physical education in the United States since 1904.

As usual, Britain followed 50 years behind. Now many degrees—BEds, BA, BScs in physical education, movement studies, recreation. Some are even doing masters' and PhDs. Sociological options in crowd violence or racial discrimination. Sport as a weapon of diplomacy in international relations—that is the history option—and we could drum up a unit on careers in management.

They will be doing basket-weaving, next. We're a serious newspaper. Sport's just for the birds. Make chauvinist pig!

That's what we need, a bit more chauvinism. The French are putting through a Bill to encourage sport and improve France's record in international sport. If we don't watch out, they'll soon be beating us at cricket as well as cats. See what they say in *The Times* today about Britain's passion to win in the athletics Euro-pen Cup Final at Nice this weekend.

And that's what we need—the passion to win. Sport could help. Howzat, two columns? Obviously, not out.

Scottish Central Institutions

from Professor L. W. Barr

Sir,—Professor Pittaway (*THES*, August 8) makes a valuable point in drawing attention to the differing ways in which higher education is organised in different institutions and countries. However, he is in error in calling the Scottish Central Institutions polytechnics and still more in equating them with the "polytechnic sector."

The Scottish Central Institutions have specialised functions, which are generally obvious from their titles and the bulk of their work is at degree or equivalent level.

For example, in Paisley College 95 per cent of the students are studying for degrees or postgraduate degrees and only 7 per cent of the full-time student equivalent numbers come from part-time students. It will be clear from this that the exclusion of part-time students from the calculation makes only a marginal difference in this case.

What is probably of much greater

per student is the extent of the college's involvement in different fields. For example, in Paisley College the majority of students are studying engineering, technology and science, although there is a rapidly growing involvement in social studies, economics and management. The extra cost of providing laboratories for the majority of students must be reflected in the annual cost per student.

Much more information is needed before any but the crudest conclusions can be drawn from the published figures. What is certain is that Professor Pittaway is seeing a comparison which is at best unfair to the Scottish Central Institutions.

are concerned. Because they have adopted a particular, specified, procedure which makes possible some useful inter-comparisons is scarcely grounds for his rather paranoid last paragraph.

Yours sincerely,
L. W. BARR,
Head of Department of physical Sciences, Paisley College of Technology.

LETTERS TO THE EDITOR

The future of academic publishing

from Mr W. Gordon Graham

Sir,—This publisher heartily concurs with Mr W. L. Gutsman's sentiment (*THES*, August 8) that "publishing should be geared to the ideal of a book-owning and educated democracy"—provided he means publishing as a whole.

However, his letter and the preceding correspondence concern academic publishing, and in terms of Norman Higham's address (*THES*, July 11) and Peter Hopkirk's article (*THES*, July 4) the upper level of academic publishing, comprising scholarly books and monographs. If this kind of publishing were to depend on book-owning individuals, it would close down tomorrow.

Mr Gutsman points out that the total purchases of British academic libraries three years ago were only £3 million and deduces from this that "academic publishing cannot continue without a strong private market." Not so. What it cannot continue without is a strong export market—to the libraries of other countries. Up to 80 per cent of the average British monograph is exported, with about half going to the United States. The institutional overseas market makes British scholarly publishing viable and this will continue to do so, even with cameras-ready copy and prices of £10 and upwards.

But between the publishing world Mr Gutsman has created and between a declining number of "monographic indulgences" and Harold Robbins—there is a wide spectrum of academic and professional publishing which is aimed at, and will continue to depend on, individual purchase. Undergraduate textbooks are the main example of these, but we can include also books on crafts and books for engineers, lawyers, doctors and other professional people. These books, too, need and achieve a substantial export market (up to 50 per cent) but, although they benefit from and

need library purchase, the market they seek is among students and professional people of other countries.

The economics of publishing today is enforcing new standards of selectivity in every sector. Those applied to scholarly books are especially stringent, because of the daunting costs of short-run books. The reduction of title output is likely to be relatively more severe in scholarly publishing also for a particular reason: during the 1960s no scholarly publisher in the United Kingdom or the United States will put his hand on his heart and deny it—there was a quiet bonanza in the publication of books which would not have appeared in print had not the world-wide library market assured at least a break-even.

No more. There will continue to be mistakes of judgment that will continue to be the days of consciously leaning on the library market for indiscriminate consumption are over.

This, I submit, is no bad thing. What is bad is the simultaneous failure of governments everywhere to recognize the unconscionable increases in the costs of book manufacture in their library budgets. Publishers of high level books will continue to rely on the indispensable service of libraries in the United Kingdom and abroad to purchase and disseminate their books, but the combined effect of mounting costs and shrinking library budgets creates what we hope is a temporary danger that some British scholarly works of merit will not find publishers. The United States is better equipped to handle this problem because of its many university presses, but they too have had their share of hard times recently.

Yours sincerely,
W. GORDON GRAHAM,
Managing Director, Butterworths, Kingsway, London.

Poly ratios

from Professor S. Pollard

Sir,—If the Rev Dr Tolley is correct (*THES*, August 8), then it appears that the staff-student ratio of polytechnics are not more favourable than those of universities by 30 per cent, as has been widely assumed, but only by 20 per cent. I feel sure that all of us doing so much more work for so much less money will be suitably cheered by this correction.

More puzzling is his second suggestion, to compare non-teaching staff ratios. What would he wish to compare them with? The numbers of books and research papers published? The number of Nobel prizes and fellowships of the Royal Society gained in polytechnics as compared with universities? The number of research contracts, or research students, attracted? It is quite sure that he wants such depressing comparisons to be published.

Yours sincerely,
S. POLLARD,
Head of Department of economic and social history,
University of Sheffield.

OU course credits

from Dr Arthur Hearnden

Sir,—Your leader (*THES*, August 8) accuses the Standing Conference on University Entrance of taking a "coffee-house" attitude over the acceptability of Open University course credits. Perhaps a word of explanation would be in order.

Last year the conference carried out a survey of current practice at universities on the admission of Open University students to full-time degree courses. The hope was that this would produce sufficient evidence on which to base general guidance on the acceptability of credits.

The survey showed that only a minority of universities had received enough applications on which to base a decision about the formalization of requirements. A further minority had had no applications at all and the majority, having had very few, had decided for the moment to treat all cases individually on the merits alongside other submissions from mature applicants without normal school leaving qualifications.

It was in view of these findings that the standing conference decided that it was too early to formulate general guidance. There was no thought of discouraging or discriminating in any way against candidates who had obtained Open University course credits.

As Frances Gibb took care to point out in her article, several universities have already accepted Open University students into their courses. Credit transfer has not been rebuffed.

Yours faithfully,
ARTHUR HEARNENDEN,
Secretary of the Standing Conference on University Entrance,
Tavistock Square, London.

Funding of research

from Mr I. A. Fox

Sir,—The case made by Mr Alfred Morris (*THES*, August 1) for the funding of research projects on a full-cost basis will arouse much interest among the independent social research organisations in this country. For many years now such bodies have had to argue most strongly to secure the payment of full overheads on research grants, and this very often without the security of on-going organisational funding.

If university research proposals were presented on the full cost basis, the research councils and other sponsoring bodies would have the opportunity to compare estimates with those submitted by the independent bodies on a like-with-like basis. Up to the present, university research has been able to put in very much more attractive estimates as most—if not all—the overheads were being met from central funds.

Yours faithfully,
I. A. MACCULLUM,
Assistant director of the computing centre.

Weekend computing

from Mr I. R. MacCallum

Sir,—I wonder why Ivor Crewe (*THES*, August 8) finds computing impossible here at weekends? In spite of the present economic climate in higher education, some careful planning some five years ago, enables the University of Essex to offer computing facilities throughout the weekend from its DEC System-10 running unattended. From 12.00 Saturday until 08.00 Monday.

The following locally published statistics relate to the weekend of 26th/27th July, 1975:

Uptime: 41 hours 59 minutes
Downtime: 0 hours 5 minutes
CPU Utilization: 74.99 per cent
CPU idle: 17.81 per cent
CPU Overheads, etc: 8.00 per cent
Jobs initiated (timesharing and batch): 249
Yours faithfully,
I. R. MACCULLUM,
Assistant director of the computing centre.

Can universities be made more efficient?

'Resource allocation within universities is done in a way which provides no incentive to efficient use of scarce resources, and encourages inefficiency'

John Dunworth and Rupert Cook discuss problems arising from the present financial structure of universities, and suggest some solutions

The economic stringencies currently being faced by the universities have many strange and paradoxical results. For instance, while academic posts are left vacant for long spells, bulbs removed from alternate corridor lights, and requests made to avoid making long-distance phone calls before noon, staff are informed towards the end of the financial year that there is still a sizeable balance in the departmental equipment fund and are invited to find uses for it.

This sort of experience is repeated in universities all over the country. To some people it is infuriating, to others it appears trivial, but it is symptomatic of a fundamental weakness in the system of financing our universities and in the methods used by them to allocate resources to individual departments.

Indeed it indicates a problem of financing and resource allocation which is present not only in universities but in any organization which does not sell its output in a competitive market, the latter constantly ensuring that the value to those receiving the services is at least equal to the cost to producers.

We have just completed at the University of Sheffield an investigation, financed by the Social Science Research Council, into possible incentives to the efficient use of resources in universities. For some years there have been assertions from a number of sources that there is scope for greater economy in the universities without any deterioration in the quality of their activities.

These assertions, despite having generated considerable hostility from many academics and administrators, appear to have impressed the Department of Education and Science, and this is reflected both in the nature of the original recurrent grant for the present quinquennium, and in the subsequent unwillingness fully to supplement grants in respect of inflation.

Whatever the size of these potential economies, and whatever the practical problems of realizing them, one thing is clear: the present system of financing the universities, and of allocating funds within them, provides no incentive to economical operation, but rather the reverse.

Under the present system a university has a revenue to meet its recurrent expenses which is largely independent of its actual performance. The system developed in a period when the student demand for places continually exceeded the number of places available. The University Grants Committee decided that the policy of providing places and universities were sometimes content to fall a substantial number of students and offer these failures as evidence of their own high standards, rather than of the poor level of instruction.

A commercial enterprise, if it is to retain its revenue and survive, must first produce goods or services which satisfy its customers, and secondly must ensure that its costs are not greater than its revenue. The chances of achieving a workable statement of aims are much greater if there are many such statements, each relating to relatively small but homogeneous academic units.

Not only are objectives diffuse, they are also changing. What a university, a department or an individual academic was seeking last year, is not necessarily what will be sought next year. Any system of incentives towards efficiency in the universities must therefore recognize that objectives are diffuse and changing. This strengthens our case for giving small academic units greater budgetary freedom.

Under the present system there is no incentive for a department to save money under any budget heading, firstly because any savings will be retained centrally, and secondly because it may well lead to a lower budgetary allocation next year. With greater freedom of expenditure a department would be able to benefit for its own savings.

There is considerable incentive to economize on equipment, for example, if the money saved can be spent on an extra technician, or a series of visiting speakers, or even to save an academic post if it can be used to finance two research assistants.

If the system is to be an incentive to efficiency, some benefits must accrue to those who economize. People will not bother to act more economically if someone else takes all the savings. It is our belief, therefore, that the maximum practical budgetary responsibility should be given to small academic units which have various objectives in common.

In some cases these units would be existing academic departments, but often departments have grown to a size where diversity of interest—and even conflict—is apparent within them, making it possible to find a natural subdivision.

We would favour units of around ten academic staff, but often the natural size would be larger than this, and sometimes less. What is vital is a fair degree of agreement on common objectives and interests.

We have argued so far that small units can be defined and agree their objectives, and are best placed to decide the most efficient way of allocating their resources between staff, materials, travel, and so on in order to fulfill their objectives and maintain the quality of their teaching and research work.

It cannot be left to individual units, however, to decide the most efficient way of allocating their resources. There is another area where greater efficiency

powers of virement are limited, and in the case of staff positions, virtually non-existent.

The experts in teaching particular subjects are the academics in the department concerned, rather than central administrators or "representative academics" on the relevant committees. To appoint the professor of aeronautical engineering as dean of technology does not suddenly make him an expert in teaching every other branch of engineering.

For this reason, leaving individual academic units the maximum possible freedom in the allocation of their total resources, rather than imposing a rigid pattern from above through the device of detailed budget heads, would contribute to a more responsible use of resources.

There is another reason for devolving budgetary responsibility to academic units within the university, and this arises from the peculiar nature of universities. The concept of efficiency has meaning only in relation to objectives, but it is extraordinarily difficult to define the objectives of a university.

Furthermore to assess efficiency we must be able to measure output both quantitatively and qualitatively, and both to measure our inputs and relate them to the production of specific outputs. In the universities we can measure the inputs, but that is about all.

As for the university's objectives, they are concerned, two things are clear. Firstly, they are diffuse. No single list of agreed university objectives can be drawn up, unless it is couched in such general terms as to have no precise meaning. It certainly cannot be ordered by priority.

While there are some university objectives that are clearly apparent, such as the fulfilment of enrolment targets, the university's mission has been achieved—many objectives emanate from individual academics, particularly in relation to their research.

Different individuals within a university, and within the same department, will have different objectives. Not all objectives will be shared by all individuals; indeed some will be mutually incompatible. The chances of achieving a workable statement of aims are much greater if there are many such statements, each relating to relatively small but homogeneous academic units.

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ever, to determine how much they should spend in total. If a unit had to sell its product in the market, then its revenue would be determined by the price which it could charge and this would determine the total amount available to spend.

Under our proposed system of budgetary devolution, the academic units' total revenue would be determined by the central administration, but would differ from present methods, however, in that a single sum would be allocated to a unit to cover all its recurrent expenses, including staff.

There would be no separate budget headings, and there would be only minimal restrictions on how units chose to spend their money. The principal restrictions would be some maximum on the number of tenured academic posts to prevent a unit over-committing the university for years ahead, and the need to pay salaries in accordance with national agreements.

Apart from these, units could spend their revenue as they wished. We envisage that this would lead quite naturally over a period of time to different staff: student ratios and generally different patterns of expenditure from one unit to another. Each unit would have an incentive to act with maximum efficiency since savings on one activity could be used to pursue some other of its objectives.

The total revenue available to a unit would be linked by a known formula to its student load each year, with due allowance for post graduates, laboratory subjects, and service teaching. The formula would consist of a fixed element, namely the minimum necessary to mount the unit's basic degree programme with an enrolment of one student, and in addition a variable element related linearly to actual enrolment. Such a formula would automatically embody economies of scale.

A budgetary system along the above lines would, we believe, provide departments with an incentive to act efficiently, and could be introduced in any university with little difficulty and without any alteration to the existing system of financing the universities by the UGC.

In introducing such a budgetary system a university would have to evaluate the fixed and variable elements in the formula in such a way that the sum of the revenue entitlements of the academic units and the revenue required for central services and administration did not exceed the total recurrent grant payable to the university by the UGC.

We do not see any insuperable difficulties in doing this. The fixed element covering the inescapable costs of running the programme as a whole would be established in consultation with the units. Such variable elements would be calculated initially so that total revenue entitlements equalled the university's recurrent revenue less its central requirements.

The relative weights for postgraduates and for the various subject-areas would need to be determined and agreed. We have analysed the distribution of expenditure between subject areas in British universities over the six years 1966/67 to 1971/72, converting them to 1975 prices using the "Tress-Brown Index." From this we have devised a series of values for the variable elements in each. These range from £1,640 per student per year in medicine and dentistry to £315 per student in education (at January 1975 prices).

These represent the arithmetic means of expenditure for each unit of student load in the appropriate subject area in each British university over the period. Any university contemplating the use of a formula such as ours must first agree its resources might be guided by such analysis of national expenditure patterns, or it might choose to calculate values based on its own experience and practice.

The problem of ensuring that units' revenue entitlements did not exceed the available recurrent finances would be eased if the UGC were to determine its grants to the universities on a similar basis.

Universities' recurrent revenue would then fluctuate in response to actual enrolment, but by a known formula which could be guaranteed over a quinquennium or any other period. Universities would not know what their actual revenue would be more than one year ahead, but they would be able to calculate their revenue for any given enrolment level.

Our discussion so far has been concerned with current expenditures by universities. There is another area where greater efficiency

of space is required, namely teaching accommodation. It is virtually impossible to judge objectively whether classrooms and laboratories are being used to the fullest practicable extent. UGC utilization norms are not particularly helpful in this respect. It is clear, however, that universities have no incentive to improve their utilization, since they are either provided by the UGC at no charge to the universities, or not provided at all.

A university itself incurs no cost in obtaining an additional building, and so will tend to press the UGC for as much accommodation as it can reasonably claim in the light of the norms. Conversely, having got the building, the university can save itself nothing by giving it up.

It is clearly more convenient to have plenty of space to arrange one's teaching in. Whether it is worth the cost is another question. But neither the department nor the university has to bear this cost. Since the cost of space to the user is zero, one may expect users to go on demanding more accommodation as long as it yields any positive benefits to them.

The marginal cost to society, however, is not zero. Buildings are extremely expensive to provide, and they command substantial annual rents. Some method of imposing on users the cost of the space they occupy may be expected to cause them voluntarily to moderate their demands for accommodation, and to do so in a way which is likely to be more efficient than the central application of increasingly restrictive norms centrally.

There is only an incentive to economize on accommodation if the savings made have some useful alternative. In practical terms this means real money, which units are free to spend as they wish.

How might a system of space charging work? The critical factor is the level at which the cost of space is set. The level we suggest would be determined by the free-market rent of space in the neighbourhood of the university.

Many universities, our own included, rent accommodation from the private sector. This rent represents the marginal cost of space to the university, since this is the space that would most easily be disposed of. All space within the university whether rented or owned, should be costed at this rate, and units charged for the space they actually use.

Units used less space than their entitlement, they would show a net credit in their space budget, which would be available to them to spend in other ways as they chose. The university would recoup the cost by reducing the amount of accommodation it had to rent, or by renting out part of its owned accommodation.

Such a policy could be expected to result in a reduction in the amount of accommodation required by units, since units would be faced with a real choice between space and other resources. It would, with care, be possible to devise an orderly system whereby units informed the university of their requirements six months, say, before each academic year, and the university organized its housing policy so that there was some lease becoming due for renegotiation every year.

A pilot project in some urban university to sort out the practical difficulties would be invaluable, but we would not expect these problems to be insurmountable. In a rural university, of course, there might be no market for surplus accommodation, and the policy would not be applicable in such cases. The majority of universities, however, could find a market for some of their accommodation.

In conclusion our research at the University of Bradford has shown that resource allocation to, and within, the universities is done in a way which provides no incentive to efficient use of scarce resources. Indeed the system positively encourages inefficiency, since departments, not being faced with the cost of resources, tend to claim as many staff, as much space, materials, travel funds, and similar items as their liberal interpretation of the norms permits.

Inefficiency builds on itself, since over time the norms are modified to reflect actual practice. Universities likewise will naturally seek to justify the maximum possible recurrent grant and accommodation from the UGC.

If the system is to work efficiently, users of resources must be charged with the real cost of the resources they use, must be given freedom of choice as to what particular resources they choose to use, and must be able to retain for their own use any funds they may save through more efficient operation.

The formula-based system of budgetary devolution we suggest could be introduced with little difficulty in respect of recurrent expenditure. Both within the universities and in the determination of UGC grants to universities. The problems of incorporating space budgeting into the system are greater, but not insoluble.

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BOOKS

Electron probe micro-analysis

Principles and Techniques of Electron Microscopy: Biological Applications, Volume 5
edited by M. A. Hayat
Van Nostrand Reinhold, £9.95
ISBN 0 442 25681 7

This is the fifth volume in a comprehensive series dealing with theoretical and practical aspects of the application of the electron microscope to biology.

It comprises, in its 250 pages, five chapters whose titles indicate that any relationship to each other is confined to the use of electrons. Thus the whole volume escapes the taint of unevenness which characterizes a collection of the views of a number of authors on any essentially similar topic.

"Quantitative Mapping" is the first short chapter by P. Sterling. It is concerned principally with the distribution of synapses in the central nervous system but the methodology, set forth here comprehensively yet succinctly, is clearly applicable to other fields in biology. As, for instance, to developmental studies on morphogenetic gradients in embryonic tissues. The author has designed and built a pantographic attachment which, while intended primarily to produce two-dimensional maps, can be used for other purposes such as particle counting and sizing, area and circumference measurements, and calculations of surface area of volume from the measurement of

profiles. This is clearly an important chapter pointing the way ahead for quantitative electron microscopy.

The second chapter (Parnell and Flint) deals with photographic aspects. Considerations of the theory of electronic interaction with emulsions are followed by sections on the relation between density and exposure, on granularity, electron response and emulsion properties and on signal to noise ratio and detective quantum efficiency. The chapter ends with practical applications such as the choice of photographic support, the choice of emulsion aspects of processing and, finally, with a description of alternative methods of recording an electron image.

Allinson deals with environmental devices in electron microscopy in chapter three, reviewing the development of special specimen holders which sustain a non-vacuum environment around the specimen. Two methods of containing a high pressure region around the specimen are presented in detail and their relative merits are fully discussed. There follows a section giving constructional details of several types of device for application both to conventional and high voltage electron microscopes. The final, particularly interesting, section describes the applications of such environmental devices.

Bjorn Johansen's chapter on optical diffraction provides a first-class survey of the whole field. Starting with a full exposition of Abbe's theory it proceeds to deal

with the concept of reciprocal Fraunhofer diffraction, the converging lens and optical transforms. These sections are followed by considerations of apparatus required and a comprehensive list of available instruments is provided.

The final chapter by Weavers describes the analysis of electron microscope EMMAA, an instrument before developing to its application, writes a length on every aspect of theory of electron probe analysis before describing the instrument and its accessories. Then, again, a length on the principles of dispersive spectrometry, energy dispersive spectrometry, and finally, a length on the principles of electron probe analysis.

The book does precisely what editor intended it to do, and, as a result, it will certainly appear on the shelves of every department library dedicated to electron microscopy. Most private individuals will probably be content with a selection of the contents as to be found in native compilations.

A. G. Everson

We are all parasites now

Ecological Animal Parasitology
by C. B. Kennedy
Blackwell Scientific Publications, £3.50
ISBN 0 632 09030 8

Parasitism is a way of life to which many groups of animals have turned, and here we have a new approach to the parasites of vertebrates, many of which have invertebrate animals as intermediate hosts or vectors. Parasitic birds, crustacea and insects are outlined, being well covered in other recent texts.

The chapters consider the ways these parasites find their hosts, their specificity and various interactions within the host; crowding effects and host immunization are of special importance here. Population changes of the parasites in their intermediate hosts and in field birds and mammals are discussed in separate chapters, an arrangement which permits some interesting comparisons. But to appreciate them fully the reader needs con-

siderable familiarity with the parasitic protozoa and the various parasitic worms which are Kennedy's main interest.

Advanced students of parasitology need to be stimulated by the book, but beginners will be troubled by many technical terms used without explanation. The writing generally lacks precision, and some terms like "control" are used far too loosely. The book would have been useful to a wider readership if it had been provided with a glossary, a fuller taxonomic appendix, and more illustrations or diagrams of the life cycles of the animals mentioned.

The final chapter, on epidemiology and models of host-parasite systems, does not get as far as it might. Had the life cycles of selected parasites been set out both diagrammatically and in quantitative terms as life tables, then it would have been easy to see which were the most critical stages of high parasite mortality. The earlier chapters often mention feedback control mechanisms, which are

known to other ecologists as dependent factors, but the book does not quantify them and measure extent to which mortality with which crowding is not considered. They have been quantified to incorporate these models in the final chapter. Four models are described briefly. It is not entirely clear how they really differ from other, but Macdonald's (1952) human schistosoma infection model is the most satisfactory.

Research workers should find this book a help both to a broad view and to plan their work so that all aspects of any parasite's life cycle are investigated and quantified. As it involves actions between three or four species it is a challenge, but which must be accepted if many serious diseases of animals are eventually to be understood.

G. C. Lloyd

Approximately the right answer

Electromagnetism
by J. S. Grant and W. R. Phillips
Wiley, £11.00 and £5.25
ISBN 0 471 32245 8 and 32246 6

The Manchester physics series is intended to provide a complete undergraduate course in physics. This volume aims to include all the electricity, magnetism, and electromagnetism for the three years of such a course. Electromagnetism is generally agreed to be a "difficult" subject at undergraduate level and the initial concepts have to be introduced and explained carefully and at length. This is hard to reconcile in a book of reasonable length with the aim of completeness and a considerable amount of selection has been necessary. The treatment of the later material is less complete and less satisfactory than that of the earlier material.

The order of presentation is essentially the classical one: electricity, magnetism, currents, magnetic fields, electrostatic induction, Maxwell's equations, electromagnetic waves and relativity. Before the section on Maxwell's equations are three chapters on circuit theory including transmission lines. These three chapters (as is recognized by

the authors in their flow diagram for the book) are not closely related to the rest of the text. They do not really contain in so small a space all the circuit work that a student will require, and it would have been more in keeping with the title and general spirit of the book to have omitted them and devoted additional space to the electromagnetism proper. With this exception the selection of the material has been done well.

The initial approach to electromagnetism is by a "microscopic" picture of atomic fields and their "macroscopic" averages. This description has obviously to be greeted with some scepticism, for the materials are as yet too few to be described in such a way that the early distinction made here sometimes seems artificial and, I doubt very much if it helps the grasp of concepts of charge and field. The treatment of magnetic materials is however much more satisfactory, than in most textbooks, and is marked only by the use of a non-standard definition of susceptibility which is not explained until the end of the chapter. The authors are also unusual in giving the name "magnetic field" to the vector \mathbf{B} (and "magnetic intensity" to \mathbf{H}), although in doing so they are following a long tradition, practice, and it is to be hoped this will soon be accepted as standard.

Complete rigour of treatment is

neither possible nor desirable in such a book, but the phrase "approximately" occurs more often than many would like. It is sometimes "it is shown" that the book and the fault is not editing only. There is a need to introduce an important idea in simple and accessible language, and many of the authors' examples are good. The book is followed by a "qualitative" generalization. Sometimes a proof is given later, sometimes the reader may thus be helped to a good approximation where it is exact.

There are a number of misprints and one or two howlers: howler is a description of a moving coil, and a misprint of "the" for "a". Many applications from atomic physics and electrical engineering are given and there is a good selection of problems with which the student is faced. The book is a good one to use as a text, and it is a pity that it is not more widely used.

In spite of such criticisms it is one of the best general texts on electromagnetism to appear in recent years. If it does not prove popular it will be through no fault of its authors. They are to be hoped this will soon be accepted as standard.

R. A. G.

BOOKS

Documentary

English Historical Documents, volume 11, 1189-1327
edited by Harry Rothwell
Eyre and Spottiswoode, £26.00
ISBN 0 413 23300 6

The publication of another volume of English Historical Documents will be welcomed by all who teach and study history. The series has the merit of assembling in one volume a wide range of documents, the important sources for English history and a wealth of subsidiary ones, together with a selection of chronicles, many of them hard of access in the standard printed editions. Moreover, the items are in an English translation; the fact that a declining number of people can read Latin, or even French, should not deter them from using basic historical texts.

Professor Rothwell's division of the subject matter is roughly tripartite: political and constitutional, ecclesiastical, and social. His approach to the great crises of the thirteenth century tends to be muted; thus complete annals from selected chronicles are printed in the first section, arranged chronologically and regardless of topic. This has the advantage that the nature of chronic writing is well illustrated, but it has the disadvantage that miscellaneous material is included—the "dear year and great frost" type of entry, in the words of Thomas Carlyle, "the world's documents speak for themselves: Magna Carta, the Provisions of Oxford, the Confirmation Cartarum."

Rothwell's emphasis is on the steady administrative developments and reforms of the thirteenth century which continued equally under the kings and barons, and continued in the reign of Edward I. The section, "Royal Government in Action", has documents illustrating the attempts of the administration to rule a predominantly "terrorized countryside" where law and order were "near breakdown".

What Professor Rothwell loses in historical depth, he gains in clarity. The section on the church's activities he concentrates on the parish level, and has a particularly interesting section, "Land and People", on life in the country and on the growth of the towns.

The recent move from political to social history, Professor Rothwell writes, "harms nothing except vested interests and can only enrich the older sorts of history, provided that, having moved away from 'drums and trumpets' we do not move into 'fashions and follies'". Luckily he does not entirely deprive us of the latter. The social scholar in the volume is by no means impaired by the fact that many of the items make enthralling reading. We learn, for example, of a bishop who invited a friend to dine on "good fat and fresh venison and an equally fat crane which chance to have been sent to us". The social scholar must not be regarded with suspicion on account of his lack of a right ear because it "was torn off in his minority by the bite of a pig", and that a prisoner paid the warden two pence for permission to sit on a bench because the jail "was full of water at the bottom".

The presentation of the texts is excellent. Nevertheless, in a book intended partly for the non-specialist, more comment on some of the items would have been helpful. The volume is not self-sufficient for elucidation; the reader must turn to the works cited in references—which may not always be at hand. For example, the statutes of Edward I have the minimum editorial explanation, and the uninitiated will surely find "The Sea Law of Oleron" not a little mysterious.

Literally the bibliography is not quite up to date: there is nothing later than 1973 and references and works published immediately before that date are few. It is regrettable that the index, in accordance with the policy of the series, merely lists the texts. However, there are some good sketch maps and useful appendices, containing lists of rulers and bishops, royal and baronial pedigrees, and Easter tables for the period.

Bernard Cragg

Antonia Granden

Grand old man

Gladstone
by E. J. Feuchtwanger
Allen Lane, £6.95
ISBN 0 7139 0827 0

Compared with the transmutation of Disraeli from the marble and bronze monument by Buckle to the impressionist and actor-manager by Lord Blake, interpretations of Gladstone have remained fairly steady. Biographers' motives and readers' attitudes have in fact changed more radically than the Grand Old Man's image. Morley wanted to set up a bulwark of the Faith. Eyck wanted to show the Bismarck-ridden German what they had missed. Magnus wanted to add personal details of nineteenth-century interior history neglected. Yet Gladstone seems to emerge much the same. Disraeli, who put his faith in dying causes—aristocracy, land, Empire—is put "relevantly" to service for twentieth-century conservatism. The steadiness of Gladstone's reputation is due largely to the fact that he has been regarded irrationally as the mouldering number of nineteenth-century causes. Nor does the great diaries project now under way seem likely to rescue Gladstone from this fate. True, there have been recent efforts to revise our picture of Gladstone. We are assured, embarked on reform in 1884 and Home Rule in 1886 as a practitioner of autonomous or "high" politics, not as the demagogue between the people and the political process; on the other hand, more radical and populist than we thought. Again, we are told that he went for Home Rule in 1886 as a way of keeping Liberalism within the bounds of a moralistic politics engendered in the 1860s and to keep it away from the materialistic temptations of a new era.

These efforts hardly ruffle the measured calm of Feuchtwanger's approach. He claims no fundamental reassessment. He does not subject any of these revisionist suggestions to searching criticism. Rather, there is a general air of somewhat bland inclusiveness. He produces, and especially the same old, good old, Mr Gladstone. His book has the predictable general merit of respectful affection for a veteran historical trouper—and is none the worse for that. There are certain welcome corrective touches to the new portrait: Feuchtwanger rightly deprecates the "stern and unbending" reputation fostered on the young Gladstone by Macaulay's brilliant phrase, and insists on the consistently Canynig character of Gladstone's Toryism, only superficially overlaid by religious loyalies and family loyalties on such things as slavery. On the later Gladstone there is a desirable and doubt about the old man's vanity and obsessiveness, his willing imprisonment among an admiring clique who promoted his own myth: "ever stronger tendency to self-delusion"; "he heard only what he wanted to hear"; "capriciousness and self-deception of old age got the better of him at times".

If only this element of candour had been employed in more central and important political issues. What were the merits of Gladstone's assessment of the Irish case, and especially his dismissal of Gladstone's brilliant phrase, and insists on the consistently Canynig character of Gladstone's Toryism, only superficially overlaid by religious loyalies and family loyalties on such things as slavery. On the later Gladstone there is a desirable and doubt about the old man's vanity and obsessiveness, his willing imprisonment among an admiring clique who promoted his own myth: "ever stronger tendency to self-delusion"; "he heard only what he wanted to hear"; "capriciousness and self-deception of old age got the better of him at times".

Richard Shannon

New World from the Spanish

English Interpreters of the Iberian New World from Purchas to Stevens (1603-1726): a bibliographical study
by Colin Steele
Dolphin Book Co, £7.00
ISBN 0 439 3778 9

Colin Steele's book examines the history of English translations of the earliest English translations of the New World. He describes when these translations were made and their original sources, and he also relates the timing of individual translations to contemporary political or economic events in England.

After a preliminary discussion of the earliest English translators, such as John Frampton and Thomas Nicholas, the author looks at the activities first of Richard Hakluyt (1551-1616) and then of his great successor, who drew heavily and openly on Hakluyt, Samuel Purchas (1577-1626). Between them they made available to the English public some of the most important Spanish accounts of the New World and its indigenous cultures—works such as those of José de Acosta and the *Coder Mendoza*.

After the death of Purchas interest in the Americas, as reflected in translating ventures, waned. This may have partly been attributable

to political difficulties at home, such as the civil war. The end of internal strife and the inauguration of a new policy towards overseas expansion—Cromwell's "western design"—led to a revival of translating as two works from the period illustrate, Thomas Gage's *The English American* and D'Avenant's *Massachusetts the Cruties of the Standards in Peru*.

It was only towards the end of the seventeenth century that interest in the Spanish Americas became generalized. Knowledge was diffused not through the efforts of great collectors such as Hakluyt but by a steady flow of general works and narratives. Private libraries came increasingly to hold material relating to the Spanish Empire in America, whereas at the beginning of the century such items would have been a rarity.

Apart from describing the translations, Colin Steele shows how much of the material used in the creation of the "Black Legend" was first made available to an English public—the works of Las Casas being the earliest source. His careful translating activity and commercial interest in the Spanish American Empire is clear and convincing.

A. W. Lovett

This week's reviewers

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